# U.S. DEPARTMENT OF ENERGY



2005 National represents the third unknown quantity or a complex variable. Chemistry: Z symbol for atomic number. Computer Science Is the name of a forma specification language used for control of the Mathematics: Z repres the set of integers. Metric Sents an SI prefix meaning 10 Military Science: Z refers Discover the unknown ...

Physics: Z is the symbol South Algebra: Z represents the the unknown quantity or hplex variable. Chemistry: Z is the symbol for a number. Company Gence: Z is the name of a formal speffication langu used for computing systems. Mathemaca Is the set of integer Metric System: Z, represents an SI prefix meaning 1031. Military Scien April 28 - May 2, 2005

Washington, D.C.

\* WWW.SCIED.SCIENCE.DOE.GOV \*

e." Physics: Z is Z is the variable fo

quantity or a comp

er. Computer Scie



# 2004 National Science Bowl® Table of Contents

| The History of the U.S. Department of Energy           | vii        |
|--|------------|
| Guest Emcee  | Х          |
| Science Bowl Alumni Officials                          | <b>x</b> i |
| Map of Regional Winning Teams                          | xiv        |
| SCHOOL BIOGRAPHIES                                     |            |
| A&M Consolidated High School, College Station, TX      | 1          |
| Albany High School, Albany, NY                         |            |
| Albuquerque Academy, Albuquerque, NM                   |            |
| Ames High School, Ames, IA                             |            |
| Baton Rouge Magnet High School, Baton Rouge, LA        | 5          |
| Benjamin Banneker Academic High School, Washington, DC | 6          |
| Brophy College Preparatory, Phoenix, AZ                |            |
| Charles M. Russell High School, Great Falls, MT        | 8          |
| Creighton Preparatory School, Omaha, NE                | 9          |
| East Brunswick High School, East Brunswick, NJ         | 10         |
| East Chapel Hill High School, Chapel Hill, NC          | 11         |
| East Rankin Academy, Pelahatchie, MS                   | 12         |
| Edmond Homeschool Co-op, Oklahoma City, OK             | 13         |
| Edmond Santa Fe High School, Edmond, OK                | 14         |
| Edward W. Clark High School, Las Vegas, NV             | 15         |
| Fairview High School, Boulder, CO                      | 16         |
| George Walton Comprehensive High School, Marietta, GA  | 17         |
| Hoffman Estates High School, Hoffman Estates, IL       | 18         |
| Idaho Falls High School, Idaho Falls, ID               | 19         |
| Irmo High School, Columbia, SC                         | 20         |
| Jamestown High School, Jamestown, ND                   | 21         |
| La Jolla High School, La Jolla, CA                     | 22         |
| Lexington High School, Lexington, MA                   | 23         |
| Liberty High School, Liberty, MO                       | 24         |
| Lubbock High School, Lubbock, TX                       | 25         |
| Lynbrook High School, San Jose, CA                     | 26         |
| Maui High School, Kahului, HI                          |            |
| Miami Palmetto Senior High School, Pinecrest, FL       | 28         |
| Mira Loma High School, Sacramento, CA                  | 29         |
| Mission San Jose High School, Fremont, CA              | 30         |

| Montrose Academy, Moscow, ID  | 31 |
|---|----|
| Mustang High School, Mustang, OK                                      | 32 |
| Nashua North High School, Nashua, NH                                  | 33 |
| Natrona County High School, Casper, WY                                | 34 |
| Oak Ridge High School, Oak Ridge, TN                                  | 35 |
| Okaloosa-Walton College Collegiate High School, Niceville, FL         | 36 |
| Parkersburg High School, Parkersburg, WV                              | 37 |
| Pembroke Hill School, Kansas City, MO                                 | 38 |
| Peter Johansen High School, Modesto, CA                               | 39 |
| Pullman High School, Pullman, WA                                      | 40 |
| Randolph School, Huntsville, AL                                       | 41 |
| Rapid City Central High School, Rapid City, SD                        | 42 |
| Renaissance High School, Detroit, MI                                  | 43 |
| Santa Monica High School, Santa Monica, CA                            | 44 |
| Skyview High School, Vancouver, WA                                    | 45 |
| Smoky Hill High School, Aurora, CO                                    | 46 |
| South Fremont High School, St. Anthony, ID                            | 47 |
| Southside High School, Fort Smith, AR                                 | 48 |
| St. Anthony Village High School, St. Anthony, MN                      | 49 |
| State College Area High School, State College, PA                     | 50 |
| St. Croix Educational Complex, Kingshill, VI                          | 51 |
| Stockdale High School, Bakersfield, CA                                | 52 |
| Sycamore High School, Cincinnati, OH                                  | 53 |
| Terre Haute North Vigo High School, Terre Haute, IN                   |    |
| The Chickasaw Nation, Ada, OK   | 55 |
| The Harker School, San Jose, CA                                       | 56 |
| Thomas Jefferson High School for Science & Technology, Alexandria, VA | 57 |
| Thomas S. Wootton High School, Rockville, MD                          | 58 |
| Timbuktu Academy, Baton Rouge, LA                                     | 59 |
| Venice High School, Los Angeles, CA                                   |    |
| Ward Melville High School, East Setauket, NY                          | 61 |
| West Valley High School, Cottonwood, CA                               | 62 |
| Woodrow Wilson High School, Portland, OR                              | 63 |
| ACKNOWLEDGMENTS   |    |
| U.S. Department of Energy   | 64 |
| Regional Coordinators & Sponsors                                      |    |
|   |    |

# Science Bowl Alumni Officials

Andrew Artz attended Smoky Hill High School and participated in National Science Bowl® (NSB) in 2002 and 2003. He is currently a sophomore at Harvard University studying physics. Andrew plans to graduate with a degree in physics in May 2007.

Daniel Ash is elated to be returning to the National Science Bowl<sup>®</sup>. He was a member of Sycamore High School's national team in 2000, 2001, and 2002 and the captain of Cincinnati Country Day School's national team in 2003. He currently attends Ohio State University, majoring in biochemistry.

Vincent Auyeung competed at the National Science Bowl® in 1998 for Arcadia High School. He is a graduating senior at the California Institute of Technology and will be attending medical school in the fall.

Matt Brandley participated in the 1996 NSB while a student at Moore High School in Moore, Oklahoma. As an undergraduate at the University of Oklahoma, he studied evolutionary biology. After graduating with a B.S. in 2001, he moved to San Diego State University to earn his M.S. studying the phylogenetics and morphological evolution of a group of lizards known as "skinks." In 2003, Matt began a Ph.D. program at the University of California, Berkeley. He continues to study lizards and snakes, but has expanded his interests to include other organisms as well. All of Matt's studies have evolved around the same concept —using the theory of evolution to explain why organisms look the way they do, live where they live, and do what they do.

Bryan Cattle attended Woodinville High School, Woodinville, WA, competing at the NSB in 2002 and as the team captain in 2003. Currently, he is a sophomore at Princeton University, where he is studying electrical engineering. Bryan's concentration is in the area of physical optics, and his current independent research is the design and implementation of a short-range 3D imaging laser-radar system for autonomous navigation and obstacle avoidance.

Dr. Adam Diament attended Venice High School and was part of the 1993 National Science Bowl® Team from the Los Angeles Department of Water and Power region. He graduated from Venice in 1993 and went to the University of California, Berkeley, where he majored in molecular and cell biology, and religious studies. He completed his Bachelor's degree in 1997 and went to the University of California, Davis, where he received his Ph.D. in genetics in 2004. His dissertation was entitled, "A Genetic Dissection of Mouse Obesity Genes Using Congenic Mouse Models." He currently is a post-doctoral fellow at UCLA where he is finding new genes that cause polycystic kidney disease.

Felix Huang grew up in College Station, TX, and competed at National Science Bowl® for A&M Consolidated High School for two years. He is now a junior, majoring

in chemical engineering at Princeton University. He likes to play bridge, ping-pong, and basketball. This summer, he hopes to perform biotech research at Princeton and practice playing bass guitar to serve on praise team for Manna Christian Fellowship next year.

Dean Jens competed for Ankeny (IA) High School in the first three Science Bowls in 1991-1993; his team placed second in the region in 1991, but made it to the national tournament in 1992 and 1993, placing second in 1993. He then earned a Bachelor's degree in math and physics from the University of Chicago and a Master's in physics from Princeton University before leaving the academic world. He has since been a developer of computer programs that send and receive financial market data over networks.

Seth Johnson graduated from A&M Consolidated High School in 2003 and attended the National Science Bowl® during his senior year. He is currently majoring in nuclear engineering at Texas A&M University. This summer, Seth will be working with the Advanced Pulsed Power Technologies Group at Sandia National Laboratories.

Jennifer Li graduated from Morgantown High School in 2001. She competed in the National Science Bowl® in 2000. Jennifer is currently attending the California Institute of Technology, with a major in biology.



# Science Bowl Alumni Officials

(continued)

Andy Livingston is a senior biochemistry major at the University of Colorado. Andy spends his time in Boulder volunteering as an emergency medical technician (EMT), skiing, mountain biking, and overseeing quality control at a local microbrewery. Following graduation, he plans on attending medical school and pursuing a career as a physician.

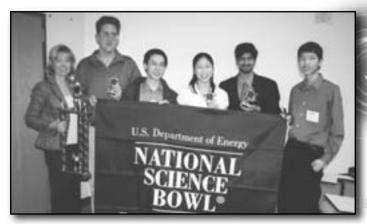
Adam Matthews competed in the National Science Bowl® with his team from Punahou High School, Honolulu, HI, in 1995 and 1997. He graduated from Harvard College with an A.B. in biochemical sciences, magna cum laude (2001). Adam is a graduate student in the Harvard University Immunology Program. In addition to several publications since graduating high school, Adam has done research with several NSF programs, received a Barry Goldwater Fellowship, and won a HHMI Predoctoral Fellowship in biological sciences in 2001. In high school, he received the Bausch & Lomb Science Award, Tandy Technology Scholar, and Best in Category Award in Biochemistry at the Intel Science and Engineering Fair.

Andrew Mills was the team captain of the 1999 NSB champions, Montgomery Blair High School, from Silver Spring, MD. He graduated from the California Institute of Technology in 1999 with a B.S. in physics, applied math, and computer science. Andrew is currently a second year Ph.D. student at the University of Texas-Austin in the Computer Science Department.

Matthew Zellman attended Johansen High School in Modesto, CA, and participated in the regional Science Bowl throughout his high school career (1999-2002), advancing to the national tournament in 2001 and 2002. Currently, he is in his third year at Cal Poly, San Luis Obispo, where he is majoring in biochemical engineering.



# A&M Consolidated High School – College Station, Texas Texas A&M University



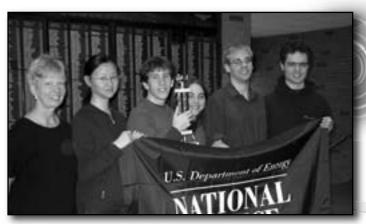
Left to right: Kristen Jones (Coach), Nathan Savir, Gilbert Huang, Jessica Wang, Dhananjay Jagannathan, Brian Liu

Team Coach: Kristen Jones received a B.S. from South Dakota State University and an M.S. from Texas A&M University, both in the field of food science, and has had six journal publications. She has been teaching chemistry at A&M Consolidated, the only public high school in College Station for twenty years. Mrs. Jones is very active in leading teacher workshops across the United States, mainly for AP Chemistry, teaching several hundred teachers each year. Some of her most recent awards include the 2002 American Chemistry Council Regional Catalyst Award, 2001 Siemens Award for Advanced Placement, and the 2000 Outstanding Texas Science Teacher Award. Kristen is married with three children and enjoys genealogy, cooking, and reading.

Team Members: Gilbert Huang is currently a junior. He enjoys math, biology, physics, chemistry, Spanish, literature, and computer science. He is a member of the Math and Science Club, Business Professionals of America, Pan-American Student Forum, and various other organizations. His hobbies include playing bridge, playing the violin, and reading excessive amounts of Dostoevsky. Born in New Delhi, India, raised in Kingston, Jamaica, and currently a resident of College Station, senior **Dhananjay Jagannathan** considers himself a citizen of the world. He is proud to have excelled in diverse academic endeavors and hopes to end his high school adventure with a bang at National Science Bowl®. In the coming autumn, Dhananjay will attend the University of Texas at Austin as a pure mathematics major affiliated with the Plan II liberal arts honors program. He also intends to pursue further education in linguistics and classics, culminating in a career in academia balancing research, writing, and teaching. Sophomore Brian Liu's favorite subjects include English and biology, and he enjoys participating in school activities such as UIL, HOSA, Student Council, and of course, Science Bowl. He has competed in Science Bowl in the past, and his team won the National Middle School Science Bowl in 2003. He also loves tennis, soccer, art, and playing the violin and piano. Brian plans to apply to Rice and/or Stanford University and wants to become a specialist in the field of neurology. Nathan Savir is a senior. Most of what you should know about him you can tell from his current reading list: "Euler: The Master of Us All"- Dunham; "An Introduction to the Theory of Numbers" - Hardy and Wright; "Princeton Guide to Advanced Physics" - Tribble; and "Six Not-So-Easy Pieces" - Feynman. He is also very tall and wears large glasses. Jessica Wang is a junior who is strongly interested in math and science. She is president of Spanish Club and Math and Science Club, and she is also involved in other extracurricular activities, including Business Professionals of America and Interact Club. She enjoys volunteering in her community whenever her weekends are not filled with competitions. Jessica currently has no college plans other than majoring in something dealing with science, but she hopes to become a researcher/professor.



# Albany High School – Albany, New York Knolls Atomic & General Electric Upstate New York



Left to right: Janice Rogers (Coach), Yeqing Tao, James Strassner, Nathana O'Brien, Kai Dallas, Joshua Hancox; Not pictured: Lawrence Smith (Coach)

Team Coach: Janice Rogers earned a B.S. and M.S. at State University of New York at Albany, and went into teaching after enjoying school, especially science classes. She has taught for more than 30 years in both public and private schools. Ms. Rogers has worked on cancer research during a summer program for teachers at a DOE lab in New Mexico. She thinks the three most important discoveries in science are: the double helix, the link between germs and disease, and Darwin's theory of evolution. Ms. Rogers enjoys traveling, especially to Africa, and rowing with a crew team. She hopes to work on environmental issues in retirement. Lawrence Smith earned Master's degrees in chemistry, administration, and history and philosophy of education. He has been a science teacher and school administrator for 33 years in elementary, middle, and high school. Mr. Smith has been at Albany High School for 28 years. He currently teaches Honors Regents Chemistry and Advanced Placement Chemistry. He thinks the three most current discoveries and uses of scientific achievement are in the fields of nuclear medicine, the many uses of a laser, and the hybrid car engines.

Team Members: Kai Dallas is a senior who will be attending Cornell University. He enjoys running track and weight lifting. He mentors inner city children in chess, and is an avid player himself. Kai hopes to be a doctor. Joshua Hancox is a senior who hopes to attend the University of Chicago next year. He is a member of two chess clubs and is captain of the Albany High Debate Team. He likes calculus, Ultimate Frisbee, and long walks on the beach. Moonlight is a plus. Nathana O'Brien, senior, founded the Albany High Science Bowl Team last year. She plans to double major in philosophy and one of the hard sciences. She is the oldest of eight children and enjoys community service activities with kids. Yeqing Tao is a senior whose favorite subjects are math, physics, and art. Her extracurricular activity is Science Olympiad. She had a volunteer research job in Wadsworth Center (New York Department of Health) in the summer of 2004. Yeqing's career goal is to become a biotech researcher; therefore, she wants to major in biology in college.

# Albuquerque Academy – Albuquerque, New Mexico Sandia National Laboratories – New Mexico



Left to right: Tommy Martin, Ann Atura, Ronald Shaw, Arjune Bose; Not pictured: Kevin Fowler (Coach), John Golden

Team Coach: Kevin Fowler holds a B.S. in agriculture from NMSU and is about to complete his M.S.T. from New Mexico Tech. He became a teacher in 1992 after serving as a project manager for construction projects at Albuquerque Academy. He serves as a volunteer and judge for local science competitions, including the New Mexico Academy of Science Paper Competition. He thinks the three most important scientific discoveries are: the wheel, the lever, and the structure of DNA. He feels honored to have the opportunity to work with this fantastic team of self-motivated students!

Team Members: Ann Atura is a sophomore. Her natural curiosity and love of learning provides the motivation for her to dig deeply into everything she does. Ann has been a regular participant in Science Bowl and Science Olympiad competitions and this will be her third trip to the National Science Bowl. Ann will be spending a lot of time traveling this spring, competing at the national level for Mock Trial, Science Olympiad, and Science Bowl. Arjune Bose is a sophomore whose favorite subjects are math and chemistry. He has a 1st degree brown belt in Kenpo Karate. He has been playing the piano for seven years and the classical guitar for six years. He has also participated in many math contests, including the AMC 12, AIME, and Mandelbrot. Although he is not certain yet, he is leaning toward a college major in engineering. John Golden is a junior whose favorite subjects are astronomy and physics. His extracurricular activities include origami, golf, and playing the tenor saxophone. He is very interested in all types of science and he hopes to someday become an astrophysicist. Tommy Martin, sophomore, has competed twice previously in the National Science Bowl®, as well as in Science Olympiad and other academic competitions. He enjoys swimming, mountain biking, and traveling. Ronald Shaw is a sophomore who has been involved in Science Bowl since 6th grade, competing once at the National Middle School® competition. Ronald competed at the National Spelling Bee twice, placing eighth in 2003. His hobbies include reading, tennis, and video games. He is interested in many subjects, including astronomy, biology, chemistry, computer science, and math. Ronald plans to study pre-medicine in preparation for becoming a physician.

DISCOVER THE UNKNOWN 2005 National Science Bowl

# Ames High School – Ames, Iowa Ames Laboratory



Left to right, front row: Xin Pan, Neal Marasinghe, Qi Gan; Back row: Kirk Daddow (Coach), Chuck Cleary, Joshua Moloney, Tom Barton (Director, Ames Laboratory)

*Team Coach:* **Kirk Daddow** earned M.A. degrees in English and history at Iowa State University and Drake University, respectively. He has been a teacher for 38 years, 26 of them at Ames High School. He also coaches all other academic teams at Ames High School as well as serving as head football coach for 17 years. His hobbies are reading and travel.

Team Members: Chuck Cleary is a junior who loves science classes. His current plan is to graduate next year and pursue a degree in mechanical engineering at Iowa State University. In his free time, he enjoys playing intramural basketball and repairing his truck. Qi (Dave) Gan is a junior whose favorite classes involve mathematics. He especially enjoys participating in various math contests. He is a huge sports fan, especially the Red Sox, Eagles, and Pacers. His future plans include studying math at the university level. Neal Marasinghe is the only senior on the Ames High Team and functions as captain. He enjoys taking AP and Honors classes as well as a number of extracurricular activities including band, Speech Club, and the literary magazine, Scratch Pad. His future plans include studying sciences with an eye on a teaching career. Joshua Moloney is a junior whose favorite classes are math and physics. His extracurricular activities are Science Olympiad, Math Club, and coaching MATHCOUNTS. His hobbies include reading, hiking, computer programming, and digital photography. He plans to attend a university, majoring in biology or physics, and to pursue a career in academia. Xin Pan is a junior who enjoys all his classes, especially physics. He has a wide variety of interests, including reading, history, photography, guitar, and building. His extracurricular activities are Student Council, intramural basketball, Robotics Club, and Science Olympiad. He enjoys community service, including Habitat for Humanity. He has vague plans for the future, but will major in one of the sciences and pursue a career in medicine or academia.

# Baton Rouge Magnet High School – Baton Rouge, Louisiana Strategic Petroleum Reserve



Left to right: Nabil Thalji, Steven Wu, Raymond Chun, Richard Pang, Joyatee Sarker, Katy Parker (Coach), Fran Frost (Coach)

Team Coach: Fran Frost earned her degree in biology education with a minor in chemistry from McNeese State University. She has been teaching for 35 years, 14 of those at Baton Rouge Magnet High School. Ms. Frost teaches Honors Chemistry and AP Biology, and assists with the Science Olympiad. Her top three choices for the most important scientific discoveries are: how DNA functions, current discoveries in biotechnology, and Rutherford's description of the atom.

Team Members: Raymond L. Chun is a senior whose favorite subjects are biology and American history. Raymond loves sports and plays baseball, football, basketball, and tennis for various teams. He also plays the violin and is a member of the Baton Rouge Chamber Music Player's trio group. Raymond is a member of three volunteer clubs and spends time at a local hospital. He plans to major in biomedical engineering and attend medical school. Senior Richard Pang enjoys science, especially math and physics. Other than the Science Bowl, Richard also participates in the French Club, Beta Club, Math Club, and Science Olympiad. For fun, he likes to eat, sleep, and play Frisbee. Richard is a fan of the Utah Jazz and Yao Ming. He is unsure of which college he will attend or what major he will pursue; perhaps it will involve math and physics. Joyatee Sarker, a senior, loves doing math and physics in her free time. During her busy times, she serves as Louisiana State Mu Alpha Theta president and Student Government president. Joyatee also dances and is extremely involved with the Interact Club. She is a National Merit Finalist, a Coca-Cola Scholar Finalist, and Baton Rouge High Student of the Year. Joyatee plans on attending Massachusetts Institute of Technology in the fall to pursue a degree in mechanical engineering. She hopes to teach this subject as a career. Nabil Thalji is a senior who thoroughly enjoys chemistry, biology, and physics courses. He is currently president of Baton Rouge High's Mu Alpha Theta Club and is the captain of the school's Science Olympiad Team, of which he has been a member for three years. However talented Nabil is at science, he is convinced that iodine is not a halogen and that the sternum is not in the torso. As a National Merit Finalist, Nabil hopes to major in chemistry or biology and eventually become a physician. He plans to attend Louisiana State University, Rice University, or Stanford University. Steven Wu, a senior, ranks science, math, and geography as his favorite subjects. A National Merit Finalist, Steven has excelled also in the Chemistry Olympiad and as a member of the Science Olympiad Team. In his free time, Steven enjoys reading, playing the piano, performing community service, and rooting for the Atlanta Braves. He is currently awaiting decisions from a number of universities, but plans to major in biology, chemistry, or perhaps biochemistry.



# Benjamin Banneker Academic High School – Washington, District of Columbia U.S. Department of Energy – Headquarters



Left to right: Justin Key, Thao Anh Tran, Anna Liebowitz, Rachel Okunubi; Not pictured: Christina Carroll, Kim Burke-Ables (Coach)

Team Coach: **Kim Burke-Ables** earned a B.S. in biology with a minor in chemistry from Delaware State University. She has been a teacher for nine years and feels that teaching is a tangible way to mold and shape minds for the future. When she was in high school, science for her was simply theory with no hands-on experience. So, she became a teacher to foster change in science instruction to make it come alive for her students through authentic hands-on inquiry based on science experiments. Three scientific discoveries she considers most important are: the atom, DNA, and gene therapy. Her hobbies include reading and travel.

Team Members: Junior Christina Carroll enjoys studying film and art. She is a member of the track and field team and a newly inducted member of the National Honor Society. Senior Justin Key graduated with honors from the Mathematics and Science program for minority students at the Phillips Academy in Andover, Massachusetts. He volunteers for Teens Against the Spread of AIDS at Children's Hospital in Washington, DC. He plans to study medicine and possibly attend Dartmouth College. He is also a member of the National Honor Society. Senior Anna Liebowitz enjoys studying biology and English, among other topics. She plans to study biology, possibly at the University of Chicago. Rachel Okunubi, a senior, is the current student body president at Banneker. In addition to her involvement on the Banneker Quiz Bowl Team and Model United Nations Club, she volunteers for Teens Against the Spread of AIDS at Children's Hospital in Washington, DC. Rachel will attend Princeton University in the fall. Thao Anh Tran, a senior, loves history and science. She serves as a docent for the Koshland Science Museum and works in the office of international programs for District of Columbia Public Schools. She recently traveled to Beijing as a participant in the US/China Exchange program.

# Brophy College Preparatory – Phoenix, Arizona WAPA – Desert Southwest



Left to right: Cheryl Lenox (Coach), Michael Mitchell, Cameron Charness, Tristan Bice, Jason Theobald, Jacob Mohin

Team Coach: Cheryl Lenox has taught science for 22 years. She presently teaches Honors Biology and AP Biology. Cheryl attended the Western State College of Colorado, University of Missouri, and Johns Hopkins University, and is completing another degree at the University of Arizona. She rides and shows cutting horses and loves to hike, fly fish, and scuba dive. She thinks the most important scientific discoveries were: penicillin, the structure of DNA, and the human genome.

Team Members: Tristan Bice, a senior and National Merit Finalist, adores chemistry, calculus, and the Beatles. He excels at academics, piano, and Varsity tennis. He currently performs community service for the National Honor Society and Calc Club, and also competes in Knowledge Masters. His greatest ambitions include learning Cantonese and discovering an equation that will bear his name. Tristan strives to double major at Dartmouth or Amherst. Cameron Charness is a junior whose interests range from astrophysics to philosophy to politics. His extracurricular activities include National Honor Society, Youth and Government, Science Bowl (of course!) and, somewhere in there, enough time to hang out with his friends. Cameron hopes to attend UC Berkeley, Caltech, MIT, or maybe Stanford (luckily, he has still got some time to decide), and pursue a career in research physics, chemistry, or astronomy – he is a bit indecisive. Michael Mitchell is a junior who spends as much time as possible working in a neuro-oncology research laboratory in Barrow Neurological Institute. He is a participant in the Brophy Science and Chemistry Clubs and is a member of the Student Organizing Committee of the Students Supporting Brain Tumor Research organization. Although most interested in science, he also participates in such groups as Amnesty International, and is a member of the National Honor Society. He would like to major in molecular biology at the California Institute of Technology. Jake Mohin, junior, has many activities and almost enough time to do all of them. He plays clarinet, guitar, saxophone, and piano for many school ensembles, such as Jazz band, of which he is vice president. Jake started crew (rowing) for Rio Salado Rowing Club this year as a novice and will continue to do it throughout high school. In his spare time he enjoys building computers and Web sites, playing racquetball, and engaging in political debates. Because he is involved in so many things, Jake does not know where he wants to go to college, but he is planning on studying chemistry at an East Coast college. Jason Theobald is a senior who plans to study biology and/or public policy in college. His honors and achievements include National Merit Finalist, AP Scholar with Honor, and Eagle Scout. At school, he is involved in orchestra and National Honor Society, and he attends nearly all home basketball games. In his spare time, Jason sings in a choir and participates in his church youth group. He also enjoys flying remote control airplanes with his dad, Scott.

DISCOVER THE UNKNOWN 2005 National Science Bowl

# Charles M. Russell High School – Great Falls, Montana WAPA – Billings



Left to right: Andrew Jones, Brodie Wages, Justin Hausauer, Rachelle Baker, Michael Jordan, Karen Spencer (Coach), Robert Harris (WAPA UGP Regional Manager); Not pictured: Josy McLean (Coach)

Team Coaches: Josy McLean is a science teacher at Charles M. Russell High (CMR). She knows just enough chemistry, physics, geology, and astronomy to teach an integrated, introductory science course to freshman. She knows a little more biology to be able to teach AP Biology to some of the best students at CMR. In her spare time (a relative constant in a teacher's universe), she likes to garden, read, be outdoors in the Montana sunshine, and take care of her diverse family (a son, a husband, the dog, the fish, and the bearded dragon). Karen Spencer teaches chemistry, advanced inorganic, and organic chemistry, and has coached Science Bowl for twelve years. Karen graduated from Montana State University in chemistry. She completed an M.A. in chemistry at Washington State University. Karen participated in the Institute for Chemical Education in Madison, Wisconsin, and was a Teacher Research Associate at Pacific Northwest Laboratories studying cell cycle regulation. In 2000, she received the American Chemical Society's Northwest Region Award in High School Chemistry teaching. Karen is married and has an 18-year-old daughter and a son who is 15. Karen enjoys skiing, traveling, sewing, playing the piano, and ringing handbells.

Team Members: Rachelle Baker is a senior. This is her second year competing in Science Bowl and her first year competing in Academic Bowl and Principals' Cup. She enjoys being involved in drama as an actor and technician and is currently participating in her eighth show. She is an active thespian. She is also well-traveled as she has been to over ten countries and participated in two mission trips. She is learning Spanish and Arabic and is excited to see where this knowledge will take her. She will be attending the University of Arizona in the fall to obtain a Bachelor's degree in astrophysics. Justin Hausauer, a senior, enjoys hunting and computer programming. He is currently programming a statistical software package for schools that cannot afford expensive software like Minitab. He plans to major in engineering. Andrew Jones, a senior, is active in many activities other than Science Bowl, including Academic Bowl, cross country, tennis, debate, and Key Club. Outside of school, he enjoys fishing, mountain climbing, and other outdoor activities. Next year, Andrew will be attending Montana State University with the intention of majoring in biomedical sciences. He aspires to be a radiologist or neuroscientist. Michael Jordan, a junior, has been involved in student government, Academic Bowl, soccer, track, and choir since his freshman year. Yes, he does play basketball, just not as well as his famous counterpart. He plans to attend a four-year university after high school, majoring in science, pre-medicine, or engineering. Senior Brodie Wages is involved in Varsity soccer, National Honor Society, and Science Bowl. Outside of school, Brodie plays center midfield with the Montana State Champions, the Helena Arsenal. He enjoys fishing, hunting, swimming, and just hanging out.

# Creighton Preparatory School – Omaha, Nebraska Natural Resources Conservation Service



Left to right: Jonathan Meyer, Robert Bowen, Peter Knudtson, Keith McDermott, Remen Okoruwa, Dave Dow (Coach)

Team Coach: **Dave Dow** graduated from Nebraska Wesleyan University with a B.S. in chemistry, attended Iowa State University, and received an M.S. from American University (DC). While pursuing a Ph.D. in inorganic chemistry at Iowa State, he decided that teaching was more enjoyable than chemistry research. He has been a teacher for nearly 31 years, 28 of which have been at Creighton Prep. Besides sponsoring a Science Club, he also coaches Science Bowl, Science Olympiad, Envirothon, and Chemistry Field Day teams. In his estimation, the three most important scientific discoveries were: the atom, the conversion of matter into energy, and the computer. Hobbies include several outdoor activities.

Team Members: Rob Bowen is a senior. Apart from his involvement in Science Bowl, he is a member of the executive board for his school National Honor Society, a captain of the school swim team, and a member of the Fed Challenge team. Outside of his many school activities he enjoys reading and playing the cello. His favorite subjects include science and English, and he plans on pursuing a medical career, though as of yet, he does not know where he will attend college. Senior Peter Knudtson is a scholar and adventurer. Peter has a passion for all things new and different. He is an Eagle Scout and has participated in two backpacking expeditions to Wyoming. When Peter is not at school or traveling, he is building models, snapping pictures, fixing computers, watching plays, reading books, or tending his garden. Physics and English are his favorite subjects, and he plans to pursue a career in engineering. He has been Science Club President and competed in Science Bowl, Envirothon, and Science Olympiad competitions. Keith ("Kermit") McDermott is a senior whose interests include computers and everything about them, space, cosmology, and the universe. His favorite subjects are math, physics, and biology. He is involved in a number of clubs and activities including Academic Decathlon; Science Club; Math Club; Ink, Inc.; Quiz Bowl; Peer Tutoring; and Computers for Africa. Future plans are to go to college at the University of Nebraska at Omaha and attend the Peter Kiewit Institute of Technology with a double major in computer engineering and electronics engineering, and possibly math as a third major or a minor. Interesting facts are that he can solve a Rubik's Cube in under 3 minutes and can juggle by himself or with another person. In addition, Keith is very organized and easily entertained. Jonathan Meyer is a junior whose favorite subject this year is calculus. He competes in T.E.A.M.S. and other academic competitions and is a member of the Science Club and goes with them to fun activities in his free time. Jonathan is a hard working athlete who, as a Varsity wrestler, went to state competition this year. He takes piano lessons and also likes to play video games with his younger brothers. Jonathan hopes to study engineering or mathematics and science in college. Remen ("Noodle") Okoruwa is a sophomore. He enjoys reading science fiction and playing Warhammer 40,000 tabletop and X-box. He is a member of the Science Club, Latin Club, Math Team, and Student Council as well as the National Junior Classical League. His favorite classes are psychology and Latin. He hopes to attend Washington University and pursue a career in neurosurgery and neurophysiology. He skipped 6th grade, is the only Nebraska regional winner to live in Iowa, and assembles and paints miniature models.



# East Brunswick High School – East Brunswick, New Jersey Princeton Plasma Physics Laboratory



Left to right: Paul Kimmel (Coach), Alex Zozula, Eric Chang, Zhengyang Zhang, Harrison Hsu, Aditya Panda

Team Coach: Paul Kimmel attended Columbia University and earned a Ph.D. at the University of California at Berkeley in physical chemistry. He has been teaching at East Brunswick High School for 34 years, and he is also a chemistry lecturer at Rutgers University. He has also been a grader for AP Chemistry Exams and is currently a College Board Consultant for AP Chemistry. Coach Kimmel is an active pianist, performing in local recitals, and is the advisor to the school's Musician's Club. He also enjoys bicycle riding, photography, and camping. His most important scientific discoveries are: atomic theory, theory of evolution, and quantum mechanics.

Team Members: Eric Chang is a junior whose favorite subjects are science and Chamber Orchestra. In his spare time, he enjoys reading and playing with Airsoft. He has participated in numerous extracurricular activities, which include Science Olympiad, JETS, Science League, National Honor Society, French Honor Society, Math Team, and cross country. Since Eric feels that his future lies in the fields of engineering, medicine, and biology, he plans on majoring in biomedical engineering at Columbia or Johns Hopkins. Harrison Hsu, a senior, is greatly interested in the sciences. He favors biology, biochemistry, and astronomy, and uses the knowledge he gains in competitions like JETS and the Science Olympiads. Thus, he also is CEO (previously president) of the local Waksman Student Scholars genetics research program. He also has an active musical life, performing as a cellist for various school, ecclesiastical, and state orchestras, and as a pianist at church. As a lover of reading, Harrison volunteers at the town library and gathers diverse knowledge for Academic (Quiz Bowl) Team. He is hoping to join a selective college for a research-related career. Aditya Panda is a junior. He was born on May 24, 1988 in the small Indian town of Berhampur, Orissa. He moved to Louisville, KY when he was ten, and then to East Brunswick, NJ at age twelve. He immerses himself in a range of activities at school, including Math Team, Model UN, Academic Team, and more. At home, he generally devotes most of his time to homework, but also enjoys programming and brushing up on practically useless general knowledge. He is unsure what to study and hopes to find out soon. Zhengyang (Bill) Zhang is a senior. His favorite subjects are physics and psychology; this would explain his extracurricular activities, which include JETS, Science Olympiad, NAQT-related competitions, and participation in the New Jersey Science League (first place in Chemistry II division last year) and Merck State Science Day (two-time Merck Scholar). Outside of these, he also plays in the school and regional orchestras and loves to bowl and play bridge with his friends on the weekends. He hopes to attend Princeton University and would like eventually to go to medical school. Alex Zozula is a junior who has participated in Science Olympiad and JETS for the past several years. Alex is planning to study either biology or chemistry in college.

# East Chapel Hill High School – Chapel Hill, North Carolina North Carolina Central University/NIEHS



Left to right: Robert Purdy (Coach), Evgeniya Bakunova, Varun Puvanesarajah, Meng Xiao He, Arnav Tripathy, Mangala Iyengar; Not pictured: Judy Jones (Coach)

Team Coaches: Judy Jones has been teaching biology and chemistry for 25 years – 21 of those in Chapel Hill. She has a B.A. in biological sciences and an M.A.T. from Stanford University. She is advisor of the Science Club at East Chapel Hill High School. The Science Club is involved in Science Olympiad as well as the Science Bowl and other general Quiz Bowls. Ms. Jones' favorite areas of science are genetics and biotechnology. She loves animals and has 20 snakes in her classroom – from rat snakes and king snakes to a large 22-year-old Burmese Python named Felix. Come visit sometime! Robert Purdy has been teaching Biology and AP Biology for over 30 years - 22 of those in Chapel Hill. He has a B.S. and a M.Ed. from Eastern Carolina University. He also has an Ed.D. from the University of Northern Colorado. He is co-advisor of the Science Club at East Chapel Hill High School and he also advises the Junior Civitans Club. Junior Civitans is a huge club that does many service projects throughout the year. "Dr. Bob" is a big fan of turtles and keeps a diverse population of these unique reptiles in his classroom. He would also welcome visitors any time!

Team Members: Evgeniya (Jane) Bakunova, senior, was born in Siberia and thinks that the winters in North Carolina are like summer! She is a strong member of the Science Club and has been the organizer of the groups that compete in the Science Bowl and the other Quiz Bowls. She has participated in the Science Olympiad competition every year. Meng Xiao He, sophomore, is another active officer of the Science Club. He won two 1st place and two 2nd place medals at the recent regional Science Olympiad competition. In his freshman year, he won an honorable mention in the Dupont Challenge Essay Contest. He also competes on the Math Team. He is the one who makes sure that team members prepare for their events! Mangala Iyengar, junior, is an outstanding competitor. She recently won two 1st place medals and one 3rd place medal at a regional Science Olympiad competition, helping the team qualify for the state competition. She is also a trophy winning member of the high school Speech and Debate Team. She is an officer of the Science Club and helps with organizing the teams. Varun Puvanesarajah, sophomore, is a strong member of the Science Club. He won two 1st place medals, one 2nd place medal, and one 3rd place medal at the recent regional Science Olympiad competition. He is a strong Math Team member and, with Meng Xiao, participated in the WRAL Brain Game, a televised general knowledge competition. Arnav Tripathy, sophomore, is an outstanding science and math student and a member of the Science Club. Arnav is also a gifted pianist and recently performed a concert to benefit the music departments of both high schools in town. When he was a freshman, he won the NC State Math Contest. He has been taking college math since he entered high school.

# East Rankin Academy – Pelahatchie, Mississippi Mississippi University for Women



Left to right: Kevin Stevens, Will Everett, Daniel Bray, Clint Baker, Adam Marshall; Not pictured: Rachel Gordy (Coach)

Team Coach: Rachel Gordy earned a B.S. in medical technology with a minor in chemistry from the University of Southern Mississippi. She worked for twelve years in a hospital laboratory. She later felt God leading her to teach. Coach Gordy has since taught chemistry, physical science, and high school mathematics for five years. She thinks that the three most important scientific discoveries are: the atom, the microscope, and penicillin. Her hobbies include spending time with her family, reading, and serving as children's Bible drill director and team leader in the women's ministry at her church.

Team Members: Clint Baker, a senior, is a member of the Varsity football and tennis teams. His favorite subjects are world and American history. He plans to attend the University of Mississippi. His career goal is to become a pharmacist. Daniel Bray, a senior, has been in Academic Quiz Bowl competitions for two years. Besides serving as student body representative, he also is a member of the History Club and Varsity basketball team. In 2004, Daniel was selected as one of 40 students from hundreds of applicants around the southeastern United States as a Trent Lott Leadership recipient. He plans to attend Mississippi State University and major in aerospace engineering. Will Everett, a sophomore, is a member of the Academic Quiz Bowl Team, Latin Club, and History Club. He also plays Varsity football. Will's academic achievements include receiving a perfect score on the National Latin Exam and scoring in the top 1% in biology in the Mississippi College Math and Science Tournament. Will's favorite subjects are mathematics and Latin. He plans to attend college and major in pre-medicine. Adam Marshall, a junior, is a member of the History Club and Latin Club. He also plays Varsity tennis. His favorite subjects are history and mathematics. Adam plans to attend college and major in engineering or pre-law. Kevin Stevens, a junior, is a member of the History Club, Latin Club, and the Varsity football and track teams. Kevin has served as a student leader for the local Fellowship of Christian Athletes Association. He is currently serving as a member of his county's youth leadership program. In college, Kevin plans to major in either medical technology or political science.

# Edmond Homeschool Coop. – Oklahoma City, Oklahoma National Energy Technology Laboratory – Tulsa



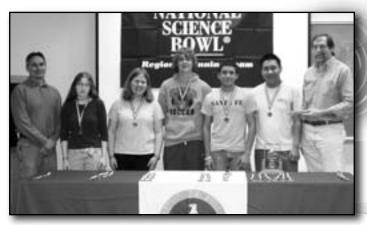
Left to right: Nancy Mansour (Coach), Braden Juengel, Josiah Shaw, Aaron Bradford, Timothy Mansour; Not pictured: Alexander Mansour

*Team Coach:* **Nancy Mansour** earned a B.S.N. from Baylor University. She has taught history for four years and coached the Academic Team for five years at the Edmond Homeschool Co-op. Her hobbies are reading and music. Her three favorite scientific discoveries or inventions are: antibiotics, computers, and frozen foods.

Team Members: Aaron Bradford is a senior homeschooled student from Oklahoma City. He plans to major in finance or economics in college and then work in either investment banking or corporate law. He is a three year letterman in football and has competed for two years on the Edmond Homeschool Co-op Academic Team. His interests include PC gaming, watching sports on TV, reading science fiction, and hanging out with his friends. Braden Juengel is a homeschooled junior. He has competed on academic teams in Oklahoma and Tennessee since he was in the 7th grade. He enjoys playing the piano and violin, and is a member of the Oklahoma Youth Symphony and the Oklahoma Homeschool Choir. He has earned his black belt in Tae Kwon Do and is currently finishing requirements for Eagle Scout. His favorite subjects are English and biology. He is undecided about his future educational plans. **Alexander Mansour** is a senior homeschooled student interested in a future as a physician. He is an Eagle Scout and the president of his senior class. He has enjoyed volunteering for political campaigns and at a surgery center. During his high school years, he has been involved in drama productions, homeschool choir, Academic Team, and church youth group. He is planning to attend Baylor University or University of Oklahoma next year. Timothy Mansour, a sophomore homeschooler, has been a member of the Edmond Homeschool Academic Team for five years. He plays piano, violin, and is a member of the Oklahoma Homeschool Choir, but his passion right now is playing basketball for the Oklahoma City Storm. Completing an Eagle project for Scouts will be one of his next major challenges. He is enjoying his physics class and plans to continue studying in the field of science. Josiah Shaw, senior, has varied interests including political science, robotics, aeronautics, baseball, paint-balling, and computers. Math, his favorite school subject, has led to an interest in aeronautics. Since he is also fascinated by robotics, he hopes to combine those interests into a degree in engineering at the University of Oklahoma. He has been involved in Edmond Homeschool Co-op Academic Team since he was in 7th grade. He is also active in leadership in his church youth group.



# Edmond Santa Fe High School – Edmond, Oklahoma National Energy Technology Laboratory – Tulsa



Left to right: Jeff Jones (Assistant Coach), Sarach Vaughan, Sophie Carrell, Tyler Morrissey, Jordan Kuehn, Shan Chen, Mark Becannen (Coach)

*Team Coach:* **Mark S. Becannen** has taught social studies for eighteen years in the Edmond School District, and has been the Academic Team coach for seventeen years. The three most important discoveries may be "germ theory," the light bulb, and the interdependence of mankind. "Science is the gateway to the future, but it is our sense of humanity that will determine what that future holds."

Team Members: Sophie Carrell is a junior whose favorite subjects are chemistry and calculus. She is active in National Honor Society and enjoys volunteering at the library over the summers. She is treasurer of the Orchestra Council and publicity chair for Santa Fe's French Club. She is active in the Academic Team and Freshmen Mentoring. She is interested in pursuing a double major in English history and biochemistry with a focus on genetics. She is thinking about attending Purdue University, the University of Oklahoma, or perhaps MIT. Her career goals include developing therapies for people with genetic disorders. Shan Chen, a senior, actively participates in band (French horn) and Academic Team, and volunteers at the Edmond Library. Chen has work experience in genetics research (Interleukin-6 studies) under Dr. Gallucci. He plans to major in medicine or biochemistry at the University of Michigan, University of Rochester, or Wake Forest University. Jordan Kuehn, a junior, is an active member of the Varsity Academic Team and the tennis team. He is currently looking at colleges and plans on visiting several over the summer. His hobbies include eating pizza and playing ping-pong as well as being actively involved in car audio. Senior Tyler Morrissey has been captain of the Edmond Santa Fe Academic Team for the last three years. He is a member of National Honor Society and has been active in the Santa Fe Latin Club for four years, including being president during his senior year. He plays goalkeeper for the Santa Fe soccer team. These accomplishments have allowed him to receive a full scholarship to Oklahoma City University where he will major in biology and play college soccer.

# Edward W. Clark High School – Las Vegas, Nevada National Nuclear Security Administration – Nevada Operations Office



Left to right: Drea Ballard, Marie Cheng, Faun Ginac, Cassie Thompson (Coach), Gregory Kraus, Beth Isaacs (Coach), Sonja Swanson

Team Coach: Cassie A. Thompson teaches Honors and AP Physics. She graduated from Brigham Young University in April 2002 with a B.S. in physics. Education has always been important to Coach Thompson and to be an educator has been very rewarding, especially when she sees her students learning to understand the world around them and being able to explain cause and effect. For fun, she coaches tennis, reads, and spends time with family and friends. The three greatest discoveries for Coach Thompson have been: Newton's First Law, Second Law, and Third Law.

Team Members: Drea Ballard, a senior, is what some would call a little "unconventional." When he is not endlessly playing music on multiple instruments or constructing potato launchers for physics, he can more likely be found on the golf course. He spends most of his after-school hours wreaking havoc and spreading joy to all who take time to listen. Senior Marie Cheng is involved in many extracurricular activities. She is treasurer of the National Honor Society and vice president of Mu Alpha Theta. She is in Varsity Quiz, Key Club, We the People speech competition, and County American Regions Math League. In college, she plans to major in microbiology and philosophy or international relations to become an epidemiologist. "Get out from under the table, Drea!" Faun Ginac, a senior, participates in numerous academic organizations and competitions, including Medical Explorers, Mu Alpha Theta, and Drama Team for her church. Faun aspires to be a disaster relief physician and join the Peace Corps. Faun enjoys Ancient Egypt, sketching, and Star Wars. Gregory Kraus, a senior, participates in numerous academic organizations and competitions, including World Affairs, Varsity Quiz, and chess. His favorite scholastic subject is mathematics, and Gregory enjoys various hobbies including archery, billiards, robotics, and mechanics. After high school, Gregory intends to go to college and major in engineering, where he hopes to become a NASA engineer. Sonja Swanson, a senior, always wondered why she read National Geographic when other girls read Seventeen – then she came to Science Bowl and found her true calling. When she's not reading Asimov, Austen, and the occasional In Style, you can find her chilling in the band room or working on National Honor Society events. Sonja loves great music and films, and her favorite animal is the liger, known for its magical powers.

DISCOVER THE UNKNOWN 2005 National Science Sowl

# Fairview High School – Boulder, Colorado WAPA – Rocky Mountain Region



Left to right: Amit Halevi, Dan Howard, Kevin Sun, Marshall Carpenter, Norris Xu, Tammy Van Meter (Coach)

Team Coach: Tammy Van Meter received her B.S. in biology and teaching credentials from Regis University in Denver; IB certification from United World College in New Mexico; and is working toward an M.A. Her son, Colin, is a sophomore at Fairview High School, where she teaches biology and anatomy/physiology. She has been involved in the School Improvement Team (co-chair) and sponsors other extracurricular activities as well as coaching the young but fabulous Science Bowl Team. When Ms. V was a wee high-schooler herself, she was influenced by the esteemed Messrs. Kerchner and Cowell toward a lifelong pursuit of biological sciences and bio-education.

Team Members: Marshall Carpenter is a freshman who likes to learn, enjoys cheese and Latin, and would like to study at Colorado School of Mines. He will play board games or any game with a clock that has helped him develop the fastest buzzer finger in the Rocky Mountain town of Boulder, Colorado. Born on a commune in Israel, junior Amit Halevi's family moved to Clarksville, Tennessee, following rumors of break-through methods of cheese production. They left shortly thereafter, moving to Boulder, Colorado, following an unfortunate episode involving a box of crayons and some aspirin. Shortly after arriving in Boulder, his family started a company for schnitzel-based aircraft engine production. It was in the study of schnitzel-dynamics that Amit discovered his dual loves for mathematics and Salsa dancing. After realizing that he was really bad at dancing, he rededicated his life exclusively to mathematics. He plans to major in applied mathematics at CalTech. Sophomore **Dan Howard** is working toward the International Baccalaureate Diploma, and especially enjoys science, math, language arts, and history. In 2003, Dan placed first in the state of Colorado National History Day competition. Dan swims for both his high school and summer teams, where he holds a league record in the individual medley and several team records. He enjoys skiing, piano, chess, and travel. He plans to pursue a career in scientific research, and is interested in fields ranging from astronomy to chemistry, and medicine. Dan plans to attend Princeton upon graduation. Kevin Sun, a sophomore, is an International Baccalaureate student. His favorite subjects include calculus, world literature, and chemistry. He enjoys playing piano and is a member of the Boulder County Youth Corps. He also competes in Knowledge Bowl, a competitionbased program. Kevin plays J.V. tennis and sprints for the track team. He is currently a member of the American Red Cross, serving as the A.Y.A.C. Ambassador. He prefers a university that offers a strong emphasis on medicine. Kevin hopes to advance to graduate school in order to acquire a Ph.D. or M.D. in medicine. Freshman Norris Xu was born in Winnipeg, Canada, in 1990. He has since been pin-balling amongst various locations, including Vancouver, Columbus, and Palo Alto, California. Currently he is stuck in a ball sink in that place known as Boulder, Colorado. His favorite school subjects include proving random numbers are equal, a.k.a. mathematics; mixing strange glowing liquids, a.k.a. science; hacking – er, computer programming; annoying people with loud screechy noises, a.k.a. band; and hitting small airborne projectiles, a.k.a. racquet sports. He survives on rice, water, and radiation from computer screens, and as a freshman, is not sure which university he will attend.

# George Walton Comprehensive High School – Marietta, Georgia Georgia College & State University



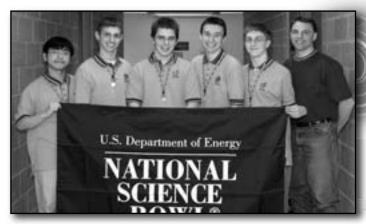
Left to right: Yujing Xue, Dragos Ilas, David Zhang, Gene Li, Ronjon Banerjee, Sharon Pepple (Coach); Not pictured: Joan Dutter (Coach)

Team Coaches: Joan Dutter has been teaching for 28 years, the last 20 at Walton High School where she currently teaches AP Physics. In addition to Science Bowl, Mrs. Dutter helps with Science Olympiad and is chair of the science department. When not involved with school duties, she and her husband, Will, enjoy spending time with their children and grandchildren. Sharon Pepple has been teaching for 15 years, the last 10 years at Walton High School where she currently teaches Honors Chemistry and AP Chemistry. In addition to assisting with Science Bowl, Mrs. Pepple is the faculty sponsor for the National Honor Society. When not involved with school duties she and her husband, Jeff, enjoy spending time with their four children, traveling, and gardening.

Team Members: Senior Ronjon Banerjee is an active participant in Science Bowl, Science Olympiad, Academic Bowl, and National Honor Society, and is currently enrolled in AP Environmental Science. He plans to study biology in college. Dragos Ilas is a senior. He was born in Romania and spent the major part of his life there. His favorite subjects are math and physics. He has been an active member of Science Bowl, Science Olympiad, Academic Bowl, and Mu Alpha Theta. Dragos wants to major in math, astronomy, or philosophy in college. Gene Li, a senior, is an active participant in Science Bowl, Academic Bowl, Science Olympiad, National Honor Society, Spanish Honor Society, and Beta Club, and is currently enrolled in two AP science courses. He plans to major in biomedical engineering at Georgia Tech. Junior Yujing Xue is an active participant in Science Bowl, Academic Bowl, Math Team, Student Government, and orchestra and is currently enrolled in AP Physics and AP Chemistry. He plans to study biochemistry in college. David Zhang, a senior, is an active participant in Academic Bowl, Science Bowl, Science Olympiad, Math Team, National Honor Society, and Beta Club. He is currently enrolled in two AP science classes. He plans to attend college.



# Hoffman Estates High School – Hoffman Estates, Illinois Milwaukee School of Engineering



Left to right: Johnny Leung, Dan Schwent, Randall Laurence, Bryan Bencomo, Ed Wagner, Joe Kulesza (Coach)

Team Coach: Joe Kulesza coaches the Hoffman Estates High School Science Bowl Team, which is in its first year of competition. Joe earned a physics degree from Illinois State University in 1992 and an M.S. in physics from Northern Illinois University in 2002. Joe's picks as to three of the most important scientific discoveries include: (1) the late-eighteenth century discovery of the platypus, (2) Pasteur's law of biogenesis, and (3) Kelvin's contributions toward the second law of thermodynamics—all of which point to the need for a Creator. Joe is married to Laura and has three children—Lucas, Caleb, and Alayna.

Team Members: Senior Bryan Bencomo is the current captain of the Debate Team and is a member of his school's Scholastic Bowl Team, golf team, and National Honor Society. Currently, his favorite class is American Government, but Bryan has a passion for all of his social science classes. His plans for the future include attending law school after receiving a B.S. in finance. Randall Laurence is a senior who enjoys math and science. Randall participates in Math Team, Scholastic Bowl, Chess Team, WYSE (worldwide youth in science and engineering), Spanish Club, senior class, National Honor Society, and tennis. Randall is a National Merit Finalist. In his free time, Randall volunteers as a tutor and has a job as a teaching assistant at a local academy. Randall plans to attend an accredited university, but is undecided about his major. Randall's motto is, "It's kind of fun to do the impossible." Siu Chun (Johnny) Leung is a senior whose favorite subject is business exploration—because he likes money. In addition to competing on the Science Bowl Team, Johnny is a member of the school's Scholastic Bowl Team. Johnny plans to major in business administration at the University of Illinois at Urbana-Champaign. Senior **Dan Schwent** is a member of the school's regional champion Scholastic Bowl Team. His favorite classes are biology, macroeconomics, and government. After graduating, Dan will attend the University of Missouri at Rolla, where he will apply his knowledge to the fields of computer science and/or biotechnology. **Ed Wagner**, the team's lone junior, is the social studies specialist for his school's Scholastic Bowl Team. In addition, Ed competes on the tennis team. For the past four years, Ed has volunteered at a local observatory/planetarium, and is as undecided about where he wants to go to college as he is about what he wants to major in. However, he expects his degree(s) to be in the area of science and/or technology (with the possibility to branch into business). Ed suspects he will wind up as some sort of engineer.

# Idaho Falls High School – Idaho Falls, Idaho Idaho National Laboratory



Left to right, back row: Ron Hampton (Coach), Trevor McQueen, Shuang Wo, John Elias, John Hatch (Coach); Front row: Jessica Bruhn, Nancy Eisenmenger

Team Coaches: Ron Hampton has been teaching high school botany/biology for 30 years. He is a Viet Nam veteran and, along with John Hatch, has coached the Scholastic Tournament Team for 15 years. John Hatch was born in Idaho Falls and graduated from Idaho Falls High School, the same school where he has taught for 30 years. He received his B.A. from Harvard University in 1968 and his M.A. from the University of Utah in 1974. Mark likes to hike, garden, and read mysteries. He has coached the Idaho Falls Scholastic Tournament (National Science Bowl®) Team for 15 years and qualified a team for the Nationals four previous times.

Team Members: Jessica Bruhn, a senior, is 18 years old and has lived in Idaho Falls all of her life. She enjoys kayaking and backpacking. Next year, she will attend college and major in biochemistry with a goal of becoming a veterinarian. Nancy Eisenmenger is a senior and lives in Idaho Falls with her family and pets. Nancy's quite dashing titles include president of the high school German Club, Nancy Man (don't ask), and Honor Society vice president. Her fine art hobbies are playing the piano and eating Italian food. She also enjoys reading intriguing science fiction novels or a good game of Scrabble or Trivial Pursuit, which she plays obsessively. Her outdoor interests include snowboarding (actually tumbling in awkward positions) at outrageous speeds down black diamonds and canoeing the cold, class III, Idaho rivers. **John Elias** is a senior who enjoys participating in school clubs, taking part in afterschool programs, and playing the drums and guitar. He also spends time volunteering at the Eastern Idaho Regional Medical Center and the recycling program he coordinates at school. In his free time, he likes to play soccer and Ultimate Frisbee. John also enjoys playing laser tag with friends, jamming on the drums with his band, and just hanging out. He likes the movie Napoleon Dynamite because it is about a kid from Idaho, and that is "flippin' sweet." In the future, John plans to study medicine and become a physician. Also a senior, Trevor McQueen enjoys running, math, biology, physics, and engineering. He is the president of the INL Scholastic Tournament Team, and treasurer of German Club and Future Problem Solving Club. He is a National Merit Finalist, a Presidential Scholar Candidate, National Honor Society member, and a six-year AIME qualifier. He has participated in Science Olympiad, National MATHCOUNTS, National History Day, and the International Future Problem Solving Bowl. He is a member of the Idaho Falls cross county team and volunteers for the local MATHCOUNTS program and the Idaho TECH Mars Rover competition. Trevor plans to pursuer a career in science or engineering. Shuang Wo, a senior, is 17 years old and has been a member of his school's INL Scholastic Tournament Team for three years. He has studied the violin for eight years and volunteers as a musician in local orchestras. He was a member of the MENC All-Northwest Orchestra in 2003 and the IMEA All-State Orchestra in 2004. Shuang enjoys chess and calculator programming in his spare time.

#### Irmo High School – Columbia, South Carolina Savannah River WSRC

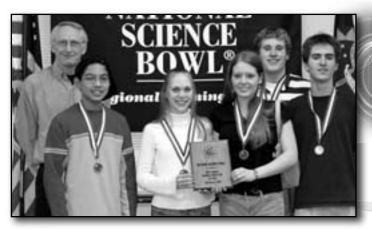


Left to right: Jacob Hiller, Patrick Hankins, James Bedenbaugh, Allison Smith (Coach), Gurjeet Guram, Jian Xie; Not pictured: Stephen Orr (Coach)

Team Coaches: **Stephen Orr** graduated with a B.S. in biochemistry from Indiana University, and obtained an M.A.T. in chemistry from the University of South Carolina. In college, he was involved with cellular transduction research and helped purify and discover a new form of protein kinase C found in retinal cells. He moved to South Carolina, where he has been teaching chemistry at Irmo High School for eight years. He loves to work with young adults and has led several extracurricular activities including the Science Team and the FIRST Robotics Team. The three most important discoveries to him are PCR, the development of nanotechnology, and frozen pizza. **Allison B. Smith** earned a B.S. in biology and an M.A.T. in secondary science education from the University of South Carolina. Formerly a middle school assistant principal, Mrs. Smith has returned to biology at Irmo High School and has been an educator for 15 years. She is a coach of the Science Olympiad Team and is National Board Certified. The three most important scientific discoveries, in her opinion, are: the structure of DNA, microscopy, and the other water. Coach Smith loves reading, skiing, and playing tennis when she is not at school.

Team Members: James Bedenbaugh is a junior whose favorite subject is chemistry. He enjoys playing the piano as well as writing music. In the future he plans to purse a career in either chemical or computer engineering. Gurjeet Singh Guram is a junior who founded and currently serves as president of his school's Teenage Republican Club. As volunteer projects, the club hosted voter registration drives and assisted at school board candidate debates last fall. His interest in politics is further demonstrated through his participation on his school's Debate Team; he has placed at the state level for each of his first two years in high school. An active member of his school's Science Team, Gurjeet hopes to enter a southeastern college and pursue a major in biology upon graduation. His ultimate career goal is to become a physician. Patrick Hankins is a senior whose favorite subjects are chemistry and history. He is captain of both the Science Olympiad Team and the Academic Quiz Team, and he formerly was involved with Model United Nations and Debate. He plans to pursue a career in chemistry and has already had a paper published in an ACS journal. Patrick plans to attend MIT, Davidson College, or the University of South Carolina. Junior Jacob Hiller is most interested in chemistry and worked at the University of South Carolina in nanotechnology research last summer. Jacob is an active member of numerous clubs including Math Team, Science Team, FIRST Robotics, Beta Club, the National Honor Society, the Teenage Republican Club, and the Teenage Democrat Club. After high school, Jacob plans to attend a northern school and pursue a biochemistry major. Jian Xie, a senior, has been a part of the Irmo Science Team since his sophomore year. He has done research at the University of South Carolina studying the affect of Ginseng treatment on lung cells using microarray methods. His other extracurricular activities include Math Team, Mu Alpha Theta, Academic Quiz Team, Beta Club, and the National Honor Society. He is the president of Mu Alpha Theta and is on the Varsity Swim Team. He plans to attend a four year college and future plans include graduate school and possibly medical school.

# Jamestown High School – Jamestown, North Dakota WAPA – Bismarck



Left to right: David McDowell (Coach), Sam Balinghasay, Sarah Berntson, Shannon Negaard, Andrew Klose, Andrew Sand

*Team Coach:* **David McDowell** is in his 27th year of teaching mathematics with interruptions for the U.S. Army and a stint as an encyclopedia salesman. He currently teaches A.P. Calculus, Precalculus, and Introduction to Algebra. Outside of school, he is heavily involved in music activities at his church.

Team Members: Sam Balinghasay is a freshman. Currently, he has no plans on where he will be going for university or what he will major in. He is involved in band, Science Olympiad, and speech. His hobbies involve listening to music, playing tennis, and Dance Dance Revolution. Sarah Berntson is a senior and is in Science Olympiad, band, Math Club, tennis, and is on the yearbook staff. She enjoys cooking, vacationing with her family, and hanging out with friends. She is looking forward to going to college next fall, though she has not made her final decision on where she is going yet. Andrew Klose is a senior and participates in Science Olympiad, band, Math Club, debate, S.A.D.D., National Honor Society, and weightlifting. He was captain of the football team and plays baseball. He plans to attend Jamestown College to play football, and will be double-majoring in mathematics and mathematics education. Shannon Negaard is a senior and has been involved in Science Bowl and every other science and math activity at Jamestown High School. She will have 28 college math credits by the time she graduates from high school this spring. She intends to double-major in mathematics and engineering. Sophomore Andrew Sand enjoys the subjects of math and science. In his free time, he likes to read books and magazines, go cycling, edit videos, and drink coffee. He is involved in Science Olympiad, Math Club, and band.



# La Jolla High School – La Jolla, California NOBCChE – Western Region



Left to right: Michael Savvas, Julian Sonderegger, Elizabeth Arnold, Walter Fairley, Jr. (Coach); Not pictured: Patricia Odero, Nichole Russell

Team Coach: Walter Fairley, Jr., earned his B.A. in history from San Diego State University and a Master's degree and credential in education administration from National University. He is currently the vice-principal at La Jolla High School, a California Distinguished School. During his eight-year tenure as coach of the La Jolla High School NOBCChE Science Bowl Team, the teams have placed in the top five teams nationally for the last six years in a row.

Team Members: Dora Elizabeth Arnold is currently a senior at La Jolla High School and has been a participant in Science Bowl competitions since middle school. Each of the past two summers, she has been involved in local science enrichment programs. She plans on majoring in biology at St. Mary's College. Patricia Odero is a junior at La Jolla High School. She is a volleyball player and a budding actress who participates in the school's many drama productions. Patricia has been a NOBCChE Science Bowl Team member for three years. Nichole Russell is a senior at Bonita Vista High School in Bonita, CA. Her interests are in art, painting, music, and the piano. She is a member of the African American Student Union at her school and plans on attending the University of California, San Diego (UCSD) or San Francisco State University to study forensics. This is Nichole's first trip to the DOE National Science Bowl. Michael Savvas is a junior at La Jolla High School and has been involved in Science Bowl/Science Fair activities since the 7th grade. He has participated in California State Science Fair competitions and has also competed in National Science Bowl science fair competitions, which were sponsored by NOBCChE. He enjoys watching and playing basketball and tennis. Julian Sonderegger is a senior at La Jolla High School. He has earned his scuba diving certificate. He has been in NOBCChE for six years and his team has twice placed second nationally. He enjoys snowboarding and snow camping. He is a member of the Jazz Ensemble at La Jolla High. He plans to attend the Air Force Academy or UCSD, where he would like to attain a Ph.D. in biology.

# Lexington High School – Lexington, Massachusetts University of Southern Maine



Left to right: Joseph Chang, Jason Leung, Shelley Yang, Andrew Ho, Albert Chen, John Hogan (Coach)

Team Coach: **John Hogan** has been the coach of the Lexington Science Bowl Team for three years. At the school, he is actively involved both in the classroom, as a physics teacher, and outside the classroom, as an assistant coach for the Science Olympiad Team and the coach of the boys' Varsity tennis team. In his spare time, he enjoys a variety of activities, including reading, sports, and traveling.

Team Members: Joseph Chang is a junior. He plays flute and piano, and fences epee every so often. He currently has no plans for college, except that he will go to one, preferably one that is well known and far away from Massachusetts. Senior Albert Chen is an active member of the Math Team and plans to attend Harvard University in the upcoming fall. Senior Andrew Ho was the captain of Lexington's NOSB Team this year and plans to attend Stanford University in the coming school year. Jason Leung is a senior. He is the eldest child in a family of five with a younger brother in 8th grade and a younger sister in 5th grade. Feeling a strong connection with the community, he volunteers at the Museum of Science and runs the peer tutoring program at his school. He wants to pursue a career in cognitive science because he believes that the processes of the human mind and brain need to be better understood. In his free time, he enjoys reading, singing, and playing cards, tennis, and basketball. Shelley Yang is a senior. As a sophomore, she and Joseph Chang were both on the Lexington team that competed at Nationals. She is also actively involved in the Science Olympiad.

# Liberty High School – Liberty, Missouri Kansas City Plant



Left to right: Rosemary Camp (Coach), Ryan Stander, Michael Richards, Hayley Vanderstel, Brandon Scholes, Jeffrey Hill, Mary Coogan (Coach)

Team Coaches: Rosemary V. Camp earned a B.S.E. in biology and an M.S.E. in educational administration from Arkansas State University and an Ed.S. in curriculum and instruction from the University of Missouri – Kansas City. She has been a teacher for ten years, six of those at Liberty High School teaching Theoretical Chemistry and Integrated Science 1. She also coaches the Liberty Scholar Bowl team and serves as co-chair of the science department. She decided to become a science teacher because of the positive influences of her own high school teachers and considers the role of serendipity to be the most fascinating aspect of scientific discovery. Mary Coogan earned B.S. degrees in chemistry and biology from St. Mary College, an M.A. in physiology and cell biology from the University of Kansas, and an Ed. Spec. in administration from the University of Missouri at Kansas City. She has been a teacher for nineteen years, five of those at Liberty High School teaching College Chemistry and Honors Theoretical Chemistry. She is co-chair of the science department and serves on the district Professional Development Committee. She thinks the three most important scientific discoveries are: quantum mechanics, DNA, and plate tectonics. Coach Coogan's hobbies include reading and travel.

Team Members: Jeffrey Hill, senior, has been a member of Liberty High School's Scholar Bowl Team for three years and was a member of the 2003 state championship team. He is a National Merit Finalist. Jeffrey plans to attend the University of Missouri-Rolla and major in computer engineering. Michael Richards, senior, has a broad range of interests including physics, history, and psychology. He is an avid reader, piano player, and captain of the Varsity Scholar Bowl Team, as well as a member of National Honor Society. Michael was recently named a National Merit Finalist and is currently undecided as to which college he will attend and major he will pursue. Senior Brandon Scholes participates in extracurricular activities that include Varsity swimming, flamenco dancing, and National Honor Society. Brandon is a National Merit Scholar and plans to attend Creighton University and study chemistry. Ryan Stander, junior, has been active in Liberty Scholar Bowl for three years. He is a member of National Honor Society and the Young Democrats Club. Ryan also holds a recommended Black Belt in Tae Kwon Do and hopes to achieve his black belt in the near future. Although he remains undecided on his choice of college, Ryan plans to major in history or political science. Hayley Vanderstel, senior, is in her second year of Science Bowl competition. Her extracurricular activities include Key Club, National Honor Society, and church groups. Her hobbies include playing classical piano and painting. In her junior year, she wrote, illustrated, and self-published a children's book, Lucy the Manatee. She donated all of the proceeds from the sale of the book to Sirenian International, a non-profit organization that researches manatees. Hayley will attend William Jewell College this coming fall, and is the recipient of the Presidential Achievement Scholarship. She plans to major in biochemistry, and would like to do cancer research after graduation.

### Lubbock High School – Lubbock, Texas BWXT Pantex



Left to right: Stanley Cho, Chris Watson, Nikil Viswanathan, John Wang, Kiefer Aguilar, Sue Diggs (Coach), Mike Mallory (General Manager of BWXT Pantex)

Team Coach: **Sue Diggs** earned a B.S. in multidisciplinary science from Texas Tech University and an M.S. in biology from Wayland Baptist University. She has been teaching biology and physics at Lubbock High for eleven years and coaching Science Bowl for four years. She has research experience at Texas Tech Health Sciences Center in microbiology and physiology. She thinks the three most important scientific discoveries are: antibiotics, electron microscopes, and telomeres. Ms. Diggs is an artist and avid reader.

Team Members: Kiefer Aguilar is a sophomore whose extracurricular activities include University Interscholastic League (U.I.L.) Math and Science Competition, Future Problem Solving (Kiefer's team has repeatedly advanced to the State and International Competition), Junior Optimist Octagon International Program, and Boy Scouts of America. Kiefer has participated in BEST Robotics, People to People International and Alumni Programs, Spanish Club (trumpet player in the Mariachi Band), All Region Band, and National Junior Honor Society (chapter president). His future plans include majoring in physics, computer science, and/or electrical engineering. Nikil Viswanathan, junior, is actively involved in the Lubbock High School U.I.L. Math and Science Team, through which he has won over 150 medals and ribbons in several competitions and has placed third in state overall. He is a part of the LHS Student Council, National Honor Society, and the BEST Robotic Team, competing at nationals. Some of his hobbies are surfing, snowboarding, and building computers. He is an Eagle Scout who enjoys playing video games and weightlifting. Junior Xiaoxi (John) Wang's favorite subjects are math, physics, biology, and chemistry. All areas of science fascinate him, but he is most interested in studying electrical and biological engineering and plans to pursue those areas through college. John would like to pursue a research career after college. He is a member of the Lubbock High U.I.L. Math and Science Team and has competed in the U.I.L Math and Science competitions for five years. He is a junior class senator in the LHS Student Council and a member of the National Honor Society. Christopher Watson, senior, is interested in physics, math, and computer science, and will attend the California Institute of Technology next year. He is a member of the U.I.L. Math and Science Team and the Computer Science Team. Christopher belongs to the National Honor Society and serves as the senior class president at Lubbock High. He is a National Merit Finalist and recipient of the Caltech Signature Award.



# Lynbrook High School – San Jose, California Stanford Linear Accelerator Center



Left to right: Amanda Day, Jessica Banchieri (Coaches), Andrew Xiao, Lisa Wang, Victor Lin, Grace Li, Andrew Ma, Martin Perl (SLAC Nobel Laureate)

Team Coaches: Jessica Banchieri, teaches Honors Chemistry and biology at Lynbrook High School. She attended UC Santa Barbara and received a degree in microbiology with an emphasis in biomedical science in 1999. Her own high school teachers and her own love for science are what influenced her to become a high school teacher. The three scientific discoveries she considers most important are: the discovery of the shape and function of DNA, the discovery of penicillin as an antibiotic, and the discovery of the breast cancer gene. Amanda Day teaches physiology and biology. After graduating from Pitzer College with a human biology degree, she attended Stanford University to earn her M.A. in science education. She is constantly amazed with the human body and life in general, and wants to spread that amazement to her students, so that they become the scientists and doctors who discover the next big breakthrough. She congratulates her students for making it this far and knows that this is just the beginning for each of them in their national success in science!

Team Members: Grace Li is a junior whose favorite subjects are math and physics. Her extracurricular activities include Math Honors Society and Future Business Leaders of America. She helps coach MathCounts and has no college plans yet. Victor Lin is a junior whose favorite subjects are biology and computer science. He has been a part of Speech and Debate and Key Club. Victor has no firm college plans, but will probably major in computer science. Andrew Ma is a senior who is involved in numerous clubs including Math Club, Science Club, Key Club, Habitat for Humanity, and Spanish National Honor Society, to name a few. He was a drummer in the marching band and wind ensemble, but he now only continues to play the piano. Andrew is also a National Merit Finalist, and is currently undecided about his college plans. Lisa Wang, senior, is the team captain for Science Bowl as well as the president of Science Club and secretary of Math Club. Her favorite subjects include chemistry, astronomy, and French literature. She plans to study chemical engineering, physics, or economics in college. Andrew Xiao, senior, enjoys being immersed in science. He is now the vice president of his school's Science Club and is a team captain on his school's Varsity Track team. Andrew will be attending Johns Hopkins University in the fall under the biomedical engineering major and will hopefully be able to juggle college classes (and life) and track (he is a hurdler). He intends to become a physician.

# Maui High School – Kahului, Hawaii U.S. Department of Energy – Pacific Liaison

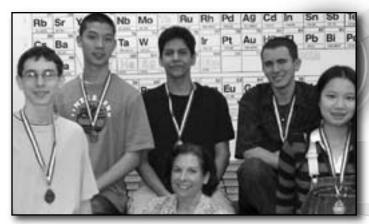


Left to right: Caine Jette, Rebecca Wunder, Christian Ling, Jonathan Nguyen, Nathaniel Salazar, Ed Ginoza (Coach)

Team Coach: **Ed Ginoza** is in his fifth year of retirement after 31 years of teaching mostly chemistry and physics. He graduated with a B.A. in chemistry and an M.A. in education from Adams State College in Alamosa, CO, and graduated as a Russian linguist from the Defense Language Institute in Monterey, CA. He has coached the Science Bowl team for 11 years and the Ocean Science Bowl team for 3 years. He is an avid sports fan who loves to play golf. He feels that the most important recent breakthroughs in science were: the invention of the "chip" and mapping of the human genome.

Team Members: Ukulele-performing, "mathletic" junior Caine Jette, an avid blitzballer and Varsity-level tennis, soccer, and volleyball player, was once an active member of various school clubs. He now has withdrawn from the social aspect of schooling in further pursuance of the more subtle complexeties of parallel programming and processing. While few things may beat "jammin' with da" custom-built, six-stringer on the beach, calculating the necessary torque in his wrist to strum those strings of variable tensions also rocks his socks off. Caine seeks one day to soup up his ride with his earnings, and perhaps attend a college in the meantime. As the only Chinese-Korean member of his team, senior **Christian Ling** brings five-spice and fire to the Science Bowl competition. Although he is now completing his fourth year at Maui High School, Christian is the youngest of his team's three seniors by birth and attitude. He relishes sleeping, daydreaming, and dozing, and has been caught doing all three (sometimes simultaneously!) in locations across Hawaii. On weekends, he enjoys cooking "Strongsauce" with his brother and friends. Rumors say that once in a blue moon, Christian becomes "Guitar Wolf" and can be heard shredding deep into the night. Senior Jonathan Nguyen, team captain, lives by the motto that "school is life." This crazy guy stocked his schedule chock full of AP classes such as calculus and computer science, and other competitions including Math League and Botball, the ultimate robotics competition. He enjoys his quiet moments though, when he solves random physics problems en route to a desired future as a physicist. Of course, he is also a fun loving he guy, and if you ever want to challenge him in any video game ever made, he will take you on. Nathaniel Salazar is the only sophomore on the team. He is a straight A student who is also a member of the Ocean Science Bowl Team, Math League, and many community service clubs. Because of his love for science, he has no choice but to love math as well. Recent accomplishments include participating in the National Spelling Bee 2003 and being a school winner of the American Mathematics Competition (AMC 10) exam. In his spare time, he enjoys watching DVDs and sitcom reruns, and playing tennis and basketball. He plans to pursue a career in engineering. Rebecca Wunder, a senior, is adding a feminine touch to an otherwise team of all males. It is hard to keep them in line, a role that only a "Wunder" Woman can play, but someone's got to do it! While battling the crippling disease of seniorities, Becky, as her friends call her, plays the piano for therapy, a treatment of 14 years in development. When the effects are not so inhibiting, she enjoys long runs and intense soccer games. After a couple of months, when cured of her ailment, she will head to Brigham Young University in Provo, UT, to study chemical engineering.

# Miami Palmetto Senior High School – Pinecrest, Florida Lake Brantley High School



Left to right: Jason LaRue, Benjamin Au, Joseph Perla, Scott Rabin, Eva Nong; Seated: Dr. Susie Kamons (Coach)

Team Coach: **Dr. Susie Kamons** holds a B.S. from Carnegie Mellon University and M.P.H. and Dr. P.H. degrees from Columbia University. She began her career as a Research Analyst for the Social Security Administration. She then joined the research faculty of Harvard University and of Cornell Medical School, where her publications include seminal work in second-opinion pre-surgical screening. She has been a teacher at Miami Palmetto Senior High School for thirteen years and previously taught at Florida International University for eight years. In addition to Science Bowl, she coaches a Chemathon Team, which has won county championships for the past four years, and sponsors the Chess Club and lacrosse team. She enjoys being part of an enriching community with dedicated peers and a highly motivated student population.

Team Members: Benjamin Au, currently a junior, enjoys playing classical violin and piano, for which he is a competition and scholarship winner. He has earned Varsity letters while playing on both Palmetto's district champion badminton team and cross country team. He enjoys math and science, having been an AIME participant and USABO semi-finalist. Through training for sports, cramming through AP classes, and destroying fellow nerds in arm-wrestling, Ben most of all enjoys sleeping. Jason LaRue, a sophomore, has dabbled in math and chemistry, but has discovered that his true passions lie in playing bridge and reciting sonnets to unsuspecting passers-by, even though he is not particularly talented at either. He's a three-time AMC school winner (though only a two-time USAMO nonqualifier - "How my achievements mock me!"). This year, he will be trying his luck at the USNCO as well as National Science Bowl® and USAMO, under the theory that he is bound to do well at least once. In his free time, Jason runs a myriad of servers over his DSL line and tries to think of ways to amuse his friends. Eva Nong, a senior, has participated in various math and science competitions throughout high school. Her newfound passion flares with making big and boring poster boards for the science fairs, which offer many opportunities for fun trips. She has taken a few AP courses and received various honors which include the Siemens AP, Discover Card Tribute, Intel Talent Search, and a few others at state and higher-than-state levels. She earnestly hopes that her knowledge from Titanic Procrastination and Master Disorganization will serve her well in college. She is now torn between Harvard and Duke Universities. Joseph Perla, a senior, is a USAMO qualifier. He has varied interests in history, science, and math, which earned him the AP National Scholar award last year. His many leadership positions in school clubs led him to create several organizations himself, including officially incorporating a non-profit. A key member on his school's winning Knowledge Bowl, JETS, and Chess Teams, this National Merit Finalist thrives on competition. Look for him representing Miami-Dade County at Florida's grueling Academic Challenge tournament. He plans to qualify for the USA's Biology Olympiad Team and wishes every team in D.C. good luck! Scott Rabin is currently a senior and plans to attend MIT this fall. He became interested in chemistry in his sophomore year and has become a published author in the field of forensic chemistry. In both his sophomore and junior years, Scott qualified to attend the United States National Chemistry Olympiad camp in Colorado Springs, a highly selective program for the top twenty high school chemistry students in the nation. He is also the regional representative for the Sunshine State Scholar award, given to the most promising math and science student in Florida.

# Mira Loma High School – Sacramento, California WAPA – Sierra Nevada Region



Left to right: James Hill (Coach), Joanna Nishimura, Brendan Chan, Albert Chi, Alex Chang, Ruslan Kurdyumov

Team Coach: James Hill teaches Honors Chemistry and International Baccalaureate (IB) Biology at Mira Loma High School in Sacramento, CA. Before moving to California, he taught upper level science in public schools and junior colleges in Virginia. James received a B.S. degree from the University of Virginia and an M.S. degree from Radford University. In addition to being the Science Bowl coach, James is also the Director of the Sacramento Regional Science Olympiad and the NorCal Science Olympiad. In his spare time, he enjoys playing piano, photography, marine aquaria, traveling, and his four Labrador retrievers.

Team Members: Brendan Chan, junior, most enjoys his IB Biology and Spanish classes. His other extracurricular activities include participation in the Junior State of America (JSA) and Landmine Awareness Clubs. In addition, he often plays his acoustic guitar to relax after a long day. Past honors include his attainment of Eagle Scout rank and his highest ranking of 7th place in the Scripps Howard National Spelling Bee. Currently, he works as a volunteer with the University of California-Davis Medical Center. **Alex Chang** is a junior and is enrolled in the International Baccalaureate Program. He enjoys his IB Biology 1 class as well as his IB HL Math 3/4 class. Alex participates in many extracurricular activities, and he is an active member of the American Cancer Society Youth Board of Directors and is part of the American Lung Association's Air Quality Assessment Pilot Program. He plays tennis on the competitive school team. Alex plans on majoring in either biological or biomedical engineering and ultimately plans on becoming a specialized doctor. Albert Chi, junior, has been a part of Mira Loma's Science Olympiad Team, Junior Statesmen of America, the National Honor Society, and Mira Loma's Web site development team. In his spare time, he enjoys volunteering at the UC Davis Medical Center, video games, Tae Kwon Do, and soccer. He plans on majoring in a science field when he enters college. Ruslan Kurdyumov is a junior whose interests include astronomy, physics, economics, history, philosophy, and debating. His favorite subjects are IB Math, Anthropology, and Spanish. He is a member of JSA, a political debate club, and is the Webmaster for his school's Young Republicans club. Currently, Ruslan volunteers weekly at UC Davis Medical Center. He hopes to study astrobiology, astronomy, or a related field in college but has not decided on a career path. Joanna Nishimura is a sophomore whose extracurricular activities include Science Olympiad, volunteering at Mercy San Juan Hospital, and the school tennis team. She is the co-president of Mira Loma's Key Club and in her spare time she enjoys reading, relaxing, and spending time with friends. Joanna's interests include biology and geology, but she is still undecided about her career goals.



# Mission San Jose High School – Fremont, California Sandia National Laboratories – California



Left to right: Dan Gui, Kevin Koai, Eric Tai, Roger Fu, George Xu; Not pictured: Jim Payette (Coach)

*Team Coach:* **Jim Payette** is the Science Department Chair at Mission San Jose High School, Fremont, CA. This is his 37th year of teaching, and his 33rd year at Mission San Jose High. He is currently teaching AP Biology, Anatomy and Physiology, and college prep Biology. Also, he has taught photography at the high school for 25 years along with science.

Team Members: Roger Fu is a senior who spends every available clear night in his backyard observing with his telescope and every available day in his garage tinkering with medieval weapons. Though he has no idea about his college plans, Roger's educational goals for this year include touring the tastes of seven common strong acids and polishing his ability to rate voltage by licking electrodes. None of this, however, will come in useful if Roger pursues a career in oceanography, as he currently wishes to. Dan Gui, a senior, claims to love science - so much that he originally planned on saying many boring, eloquent things about science in this bio, but eventually decided against it. He does, however, enjoy badminton and is known as "Badminton Boy" by some. Last summer he participated in the University of California at Davis Young Scholars Program and enjoyed his research on the importance of tyrosine sulfation in a specific protein of the bovine leukemia virus. Studying for Science Bowl, Ocean Science Bowl, Quiz Bowl, or math contests; playing badminton; and researching take up a lot of his life, but Dan also enjoys speaking Chinese, playing the piano, reveling in his relatively newfound joy of DSL Internet, and being extraordinarily peppy. Dan looks back fondly on his high school and Science Bowl years, and he hopes that college will be as fun and interesting. Kevin Koai is a senior who was born in Massachusetts and still loves the snow. He indulges in all branches of academia, especially math, literature, and chemistry. Most of the illogical things he does may be attributed to sleep deprivation, a phenomenon with which he has become intimately familiar these past few years. He also plays and teaches piano, and some of his favorite musical figures include Johannes Brahms, Sergei Prokofiev, Stephen Malkmus, and Tom Waits. He enjoys playing Quiz Bowl and is a three-time USAMO participant, and his college and career plans are currently hazy. His teammate Roger has dubbed him "Kevin von Einfacheantwortbergen," or "Kevin of the Mountains of Easy Answers" - one can always hope. Senior Eric Tai has a strong distaste for the flaunting of academic achievements and accolades and would rather be known for his tough defense during Sunday afternoon pickup basketball games and his impeccable taste in classical music. Nonetheless, he was a member of the winning team in the National Ocean Science Bowl and has worked for the United States Geological Survey for two summers. Eric was on the Varsity tennis team for two years and is always game for anyone willing to risk the agony of defeat. Eric is interested in pursuing a career in scientific research and is leaning toward following his father's footsteps in studying physics. George **Xu** is currently a junior. This is his second year of Science Bowl, and he hopes it will be just as enjoyable as the first. He is interested in all areas of science, but his specialty, at least for Science Bowl purposes, is earth science. He also enjoys swimming and playing piano. He considers himself a bit young to be making concrete decisions about his future, but he is leaning toward studying medicine or biotechnology after he graduates.

# Montrose Academy – Moscow, Idaho Battelle Energy Alliance – Idaho

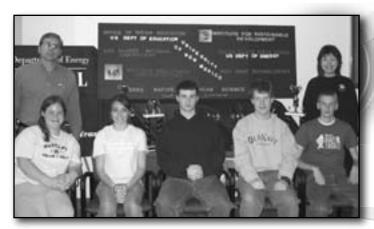


Left to right: David Scott, Emily Nelson, Cecily Gordon, Andrew Blevins; Standing: Kieran Gordon, Paul Nelson (Coach)

Team Coach: **Paul Nelson** is a graduate of the University of Washington in accounting and quantitative methods. He teaches/coaches because he loves kids and competition. Outside the classroom, he designs and markets education posters for schools. For the sheer fun of it, Paul prepares tax returns and financial statements for friends. He feels the three scientific discoveries of most recent importance are: the development of the integrated circuit, the mapping of the human genome, and the determination of the double helical structure of DNA. When Paul is not translating the Dead Sea Scrolls into Mandarin Chinese, he plays softball and lifts weights.

Team Members: Andrew Blevins is a senior who plans to attend Cornell University next year and get a degree in applied and engineering physics. During his free time, he enjoys snowboarding (on non-El Nino years), reading, sewing, and computer programming. After college, Andrew plans to pursue a career in nanotechnology. Senior Cecily Gordon is interested in history, music, and sewing. She enjoys playing the piano as well as designing and making costumes. Cecily plans to major in music and costume design when she enters the University of Idaho this fall. Kieran Gordon is a 17-year-old junior who has been home-schooled all of his life in addition to taking Latin at Montrose, and this year, math at the local public high school. He also plays violin and viola and participates in youth symphony. Kieran also enjoys art and building things. Emily Nelson is a junior. Her parents, Paul and Heather Nelson, are the coaches of the team. Emily also plays shortstop on the high school softball team and is a cellist. David Scott is a junior and is in his third year of the INL Scholastic Tournament (National Science Bowl®). In his spare time, he plays video games a lot – a whole, whole lot. But, he is considering getting into Warhammer 40K. David is planning on enrolling as a mechanical engineering major at the University of Idaho.

#### Mustang High School – Mustang, Oklahoma Institute for Sustainable Development



Left to right, front row: Laresa Miller, Ashton Glover, Dylan Willett, Teddy Swang, Justin Willis; Back row: Terry Spencer, Brenda Lindsay (Coaches)

Team Coaches: Coach Brenda Lindsay earned a B.S. in science and math education and a Master's in science education at the University of Oklahoma. She loves science and the history of science, and thinks the three most important scientific discoveries were: atomic theory, DNA, and the plow. She has been teaching for 18 years at Mustang High School and presently teaches chemistry. Brenda's favorite hobbies include gardening, traveling, reading, and crossword puzzles. Assistant Coach Terry Spencer is a member of the Seminole Tribe of Oklahoma who earned his B.S. in history at East Central University in Ada, OK and Masters Degree in guidance and counseling at the University of Central Oklahoma in Edmond, OK. He has been an educator for 37 years, 28 of those as a counselor at Mustang High School in Mustang, OK. This is his 4th trip to the Native American Science Bowl. He is proud that Mustang's team placed 1st in 2002 in the large school division.

Team Members: Ashton Glover is a sophomore. Her extracurricular activities include STUCO, National Honor Society, band, guard, and soccer. Ashton's future plans include attending a Division I school and majoring in medicine or pursuing a career in soccer. She is a member of the Chickasaw/Choctaw Tribe in Oklahoma. Laresa (Reese) Miller is a junior who enjoys math. She is a member of the Cherokee Tribe. She is a member of the Spanish Club and National Honor Society, and plays on the Varsity softball and track teams. Laresa plans to attend college on an athletic or academic scholarship. After college, she plans to be an Olympic softball player and, in order to make extra money, she will have a part-time job at NASA as one of the leading scientists. If that does not work out, she plans on starting a band that will sweep the world with a fusion of rock and polka. Teddy Swang is a junior whose favorite subject is mathematics. He is the treasurer of the school's National Honor Society. His extracurricular activities include Academic Team, JETS Team, National Honor Society, and active membership in Cherokee Hills Christian Church Youth Group. He has won and placed in many individual academic competitions in local, state (1st place mathematics test – University of Oklahoma (OU) Engineering Fair), and national (12th place in U.S. National High School Mathematics Championships) competitions in multiple subjects. As for volunteer work, he helps out in the technical and children's ministry at church and volunteers often with the National Honor Society. Teddy's future plans include attending a university, possibly OU, and majoring in mathematics, science, or engineering. His career plans include a professorship and work as a scientist or engineer. Dylan Willett is a junior whose favorite subjects are American History and English III. His extracurricular activities are Academic Team, Native American Science Bowl, and Relay for Life. His future plans involve attending Oklahoma City University to major in business management or business law. His career goal is to become a music producer. He is a member of the Pottawatomie Tribe in Shawnee, OK. Justin Willis is a junior whose favorite subjects include English and history. His extracurricular activities include National Honor Society, DECA, and Spanish Club. Justin has also been involved in several volunteer projects. He plans to attend college after graduating from high school. Justin is a member of the Choctaw Tribe.

#### Nashua North High School – Nashua, New Hampshire Brown University



Left to right: Mark Keller, David Price (Coach), Jennifer Hauser, Brenda Haggerty, Garrett Nelson, Mike Sennott, Mo Belanger (Assistant); Not pictured: Allison Krones (Coach)

Team Coaches: Allison Krones earned her Bachelor's degree in chemistry from Valparaiso University in Valparaiso, IN. She has been teaching for four years, all in Nashua. This is her first experience with the Science Bowl. When not busy at school, Allison can be found sewing, knitting, or outside enjoying New England. David Price earned his Bachelor's degree from Daniel Webster College in Nashua, NH. A pilot himself, Dave has been teaching Aerospace and Physics in Nashua for a number of years. This is Dave's first experience with Science Bowl, although he is a veteran FIRST and TSA advisor. While not at school, Dave runs in marathons, flies planes, and uses his previous experience as a Napa Valley vineyard manager to make his own wine.

Team Members: A rookie Science Bowler, senior Brenda Haggerty picked up the game quickly, despite many blurts, and led her team to regional victory. Brenda will be attending De Sales University in the fall where she will be studying chemistry; she looks forward to using many scoopulas. When not in school, Brenda plays basketball and is a whiz with yarn. Sophomore Jennifer (Jenny) Hauser is very excited to be participating with the Nerdzillas in the National Science Bowl® this year. Jenny has an interest in astronomy, biology, and computer sciences. She currently runs her own MMORPG with a friend and has taught herself a great deal of JavaScript and HTML. She has also been in over thirty musicals/plays and has a strong interest in the performing arts and music. In addition to being a Nerdzilla, senior Mark Keller holds all offices of the National Latin Honor Society, is a member of the Green Club, and Ski Club, and is a founding member of the RPS Club. He is also a captain of the ski team. A prior biotechnology student, Mark strikes fear into his opponents while dressed to kill in his sporty white lab coat. Mark plans to study some sort of science or engineering at a university to be determined by May 1. Garrett Nelson, a senior, is renowned in the Nashua science community for his "electrons do not exist" theory. In addition to serving on the school senate and various other clubs, he is the founder and president of the President Chester A. Arthur Aficionados Society and claims to have highly developed laser vision. Garrett will be going to college in the fall to study something to be determined within the next four years. Michael Sennott, a senior, has been a member of the Nashua North Science Bowl Team for the last three months. He is highly involved in music and enjoys playing the guitar. Rumor has it that some of his music is big in Europe. He is undecided as to his college concentration and does not yet know which university he will be attending next year. Mike is also interested in computer animation and sports. He is proud to be a member of the Nerdzilla team, and considers that the experience changed his life.



# Natrona County High School – Casper, Wyoming Rocky Mountain Oilfield Testing Center



Left to right: Mattie Wyatt, David Stamp, Lindsay Nelson, Ryan Falber, Denise Schwartz (Coach); Not pictured: Jay Shah

Team Coach: Denise Schwartz earned her first Bachelor's degree in history, with a minor in chemistry in 1996 from Black Hills State University. She earned her second Bachelor's degree in education in 1999. She has been a chemistry teacher for three years and the Science Club sponsor for one year. She was influenced to teach by her 9th grade history teacher and her 11th grade algebra/chemistry teacher. She believes the three most important scientific discoveries are: radioactive isotopes, DNA, and cloning. Her hobby includes showing dogs in AKC/UKC Obedience, AKC/NADAC Agility, and AKC Conformation shows.

Team Members: Ryan Falber is a senior whose favorite subjects are math, physics, art, and music. He is a member of the Varsity golf team, the Vocal Jazz Ensemble, and the Science Club; and is a "one-time-only" thespian. He plans, after graduation, to attend South Dakota School of Mines and Technology and major in electrical engineering. Lindsay Nelson, a senior, is new to Science Bowl. She is involved in National Honor Society, runs track, plays the oboe, and volunteers at the public library. She has received numerous state awards in writing, music, math, and science; and was recently named a National Merit Finalist. Her favorite subject is science, specifically biological science. She will attend Pacific University next year and major in biology, as she intends to enter the medical field. Jay Shah is a sophomore in the largest school in Casper. His favorite subjects in school are math and science. He considers these subjects to be very interesting and challenging. He is on the Principal's Honor Roll list. He is on the Forensics Team and he also represents his school in the History Day. He is a volunteer in the library and historical museum in Casper. He has plans to go into medicine in the future. David Stamp, team captain, is a junior. He is a Nordic skier and a participant in many activities. His favorite subjects are chemistry and physics. He has participated in JETS, Science Olympiad, Math Bowl, and many other similar activities. He is an active community volunteer. He plans to study aerospace engineering in college, hopefully at MIT or Caltech. Mattie Wyatt, a senior, has been a member of the Science Bowl Team for two years. Her extracurricular activities include studio, softball, and praise team. Mattie plans to attend Casper College and later the University of Wyoming to obtain her Doctorate in pharmacy. She has received the Presidential Scholarship for both schools.

#### Oak Ridge High School – Oak Ridge, Tennessee Oak Ridge Institute for Science & Education



Left to right: Nick Grabenstein, Owen Worley, Ryan Lee, Andrew Jallouk, Jingyuan Wu; Not pictured: Dr. Nita Ganguly

*Team Coach:* **Dr. Nita Ganguly** has a Ph.D. in genetics from the University of North Carolina, Chapel Hill. She worked as a Research Associate at the University of California, Irvine, and the University of Tennessee, Knoxville. She became a high school teacher to impart her love of science to her students. Her hobbies are reading, gardening, and teaching Indian dance to children in the community. The three most important discoveries according to her are: the DNA double helix, the Laws of Mendel, and the mapping of the human genome.

Team Members: In junior Nick Grabenstein's opinion, only five things are really necessary: chemistry, physics, biology, calculus, and most importantly, computers. He is an avid gamer who justifies his many hours of counter-strike and Halo by saying that it improves his speed on the buzzer for competition. When not fixated to a glowing screen, he plays on the school soccer team and fulfills the responsibilities of the vice presidency of the junior class. Junior Andrew Jallouk is the youngest on the team and the most quiet. Nevertheless, this silent exterior is but a façade for a constantly active mind. A go-to man for math and science help, he is the Math Counts state champion and a Science Bowl team member. Additionally, he enjoys chess, music, computers, and volunteering at the Children's Museum and elementary schools. Senior Ryan Lee is the undisputed and omnipotent dictator of the Oak Ridge Science Club (or so he'd like to think). Learning from both Sun Tzu and Machiavelli, he ruthlessly leads both the Science Bowl and Science Olympiad Teams as this year's captain. His colleagues also suspect that Ryan was born a century too late, as he believes that the demise of civilization will be due to a lack of respect for afternoon tea and correct table settings. A National Merit Finalist and model UN delegate, this "enlightened despot" enjoys dabbling in the kitchen, at the easel, and on the cello. Senior Jingyuan Wu has honed his skills on the Battlefield, micromanaging heroic dragoons against pernicious Zerg hordes even when grossly outnumbered, making even the legendary Napoleon and Hannibal appear as lowly cowards. As a side note, he is a Physics and Biology Olympiad Finalist, a National Science Olympiad Gold Medalist, the vice president for the school's National Honor Society, and a second time National Science Bowl® participant. More importantly, however, his ability to mass produce and supply carrier fleets in Star craft is unrivalled among his peers, earning him the title "Master Jingaling."

# Okaloosa-Walton College Collegiate High School – Niceville, Florida Florida Panhandle Region



Left to right: Emily Hopper, Yahya Mohammed, Hannah Fay, Matthew Dupont, Zach Gershkoff, Ross Hamilton (Coach)

Team Coach: Ross Hamilton has taught a variety of courses over a 34-year tenure in the Science Department of Okaloosa-Walton Community College. He retired as Chair of the Science Department in 2002 and returned to work in the OWC Collegiate High School in 2003, where he serves as Associate Director and Instructor in Biology. His academic interest focuses on estuarine biology, and especially the Choctawhatchee Bay. Mr. Hamilton earned an M.S. from Louisiana State University, Monroe and a Bachelor's in biology from William Carey College. His academic competition background includes thirteen years as coach for the Okaloosa-Walton Community College team, and two years with the Collegiate High School students.

Team Members: Matthew Dupont is a senior. His science interests include computer science, medical sciences, computer engineering, electrical engineering, and circuits. Matthew will receive an Associates of Arts degree from Okaloosa-Walton College, concurrent with his high school graduation in May 2005. His future plans consist of attending the University of West Florida, and obtaining a Master's degree in either computer science or computer engineering, with career plans still undecided. Senior Hannah Fay is a National Merit Finalist and will receive an Associate of Arts degree from Okaloosa-Walton College, concurrent with her high school graduation in May 2005. She was the top performer in the Florida Community College's Brain Bowl competition, where she led her team to the state championship in 2004. She also led her high school team to a regional championship in 2005. Hannah will pursue a degree in geology upon her graduation in May 2005. This is her second trip to the National Science Bowl<sup>®</sup>. Zach Gershkoff is a junior and new to Science Bowl competition. He is proud to have written a plug-in for Mozilla's Mycroft project. An avid reader, Zach has had a story published in the anthology, Curiouser and Curiouser. Zach has completed college classes in General Biology, Oceanography, and Chemistry I, and he is currently taking Chemistry II. Emily Hopper (alternate) is a sophomore. Her scientific accomplishments include the completion of four science fair projects. Emily is a member of the International Thespian Society, Phi Theta Kappa, Mu Alpha Theta, Academic Team, Marine Science Bowl, and Science Bowl Teams. She plans to attend Macalester College with a double major in chemistry and musical theater. Emily would like to go on to Duke University's Medical School and become a pediatrician. Yahya Mohammed (captain) is a junior. He enjoys participating in science and math activities. His science research has earned him numerous prestigious awards and honors at the regional, state, and national levels, including being named one of the top 40 young scientists in the nation by Discovery Communications/Science Service. An asteroid has been named after Yahya by the MIT Lincoln Laboratory. Also, Yahya competes in the AMC and USAMTS and has qualified to take the American Invitational Mathematics Examination every year since 8th grade. Yahya also enjoys gardening, reading, chess, and tennis. This is his second trip to the National Science Bowl<sup>®</sup>.

#### Parkersburg High School – Parkersburg, West Virginia National Energy Technology Laboratory – Morgantown



Left to right: Lisa Berry (Coach), Shaina Meyers, Ronald Jacobs, Kavi Dotson, Steven Brooks, Sujal Modi, Steven Woodruff (WV Science Bowl Coordinator)

Team Coach: Lisa Berry earned her B.S. in education, with concentrations in chemistry and physics, from Miami University. While in college, she spent three years working at Howard Laboratories. She has been teaching at Parkersburg High School for the past twenty years. During this time, she has coached Science Olympiad and JETS, sponsored Physics Club, and is currently the National Honor Society advisor. Outside of school, Lisa stays busy with two active teenagers of her own and can often be found volunteering for community projects.

Team Members: Steven Brooks is a junior who is actively involved in Science Bowl, Quiz Bowl, Key Club, Ski Club, Physics Club, Junior Cabinet, and Cinema Club. He is the starting Varsity goalkeeper for the soccer team. He is a member of the National Honor Society and the National Latin Honor Society. He is actively involved on the American Cancer Society Teen Board, and is an Eagle Scout and Junior Assistant Scoutmaster of Boy Scout Troop 92. Steven plans to go to West Virginia University, Duke University, or the College of William and Mary to study pre-medicine, and then go to medical school. Kavi Dotson, a senior, is active with his school's Academic Team, National Honor Society, crew team, Renovations Committee, and Physics Club. His hobbies include playing the piano, chess, and working crossword puzzles. After attaining an undergraduate engineering degree, he plans to pursue a Master's of Business in graduate school. Ronald Jacobs, a junior, is an honor roll student who is an active member of National Honor Society, Quiz Bowl, Teenage Republicans, and Key Club, of which he is treasurer. He has won several regional math and science competitions. He has volunteered for the American Cancer Society, the Ohio River Clean-up Sweep, local food drives, his church youth group, and was part of a student-volunteer group that repainted part of his high school this past summer. He tentatively plans to study chemical engineering in college. Sujal Modi is a senior who enjoys taking a variety of courses and wants to continue to do so in college. Honors include being selected as Elks Lodge Teenager-of-the-Month, All-Conference Finalist in Varsity tennis, and 1st Place Winner in the National Spanish Exam Level III for West Virginia. His extracurricular activities range from participating in Academic Team to volunteering at St. Joseph's Hospital. Also, he serves as vice president of National Honor Society and is captain of the tennis team and Academic Team. In the future, Sujal plans to take pre-medicine classes in order to become a physician.



# Pembroke Hill School – Kansas City, Missouri Kansas City Plant



Left to right: Joe Reardon, Jeff Sigler (Coach), Alex Sokolovsky, Michael Steinhaus, Stephen Fried, Elizabeth McIntyre (Coach), Elliott Fried

Team Coach: **Jeff Sigler** has Bachelor's degrees in history (Central Missouri State University), and chemistry and education (University of Missouri at Kansas City). He has been teaching for 16 years, 8 of those at Pembroke Hill School in Kansas City, MO. Mr. Sigler enjoys long walks in the woods with his lovely wife, Linda. He sees the atomic theory, the geocentric model of the solar system, and filtered municipal water as the most important scientific advances.

Team Members: Elliott Fried is a senior who likes biology, physics, and history. Aside from his love of science, he also enjoys military history. Elliott also partakes in Science Olympiad, Youth in Government, The Garret (which is a poetry collection sponsored by the school) and the Junior State of America. Elliott has won the independent study cup and a National Merit Letter of Commendation. In the future, he hopes to enter medicine or engineering. Senior Stephen Fried finds that when he is not deluged with work and study, the most enjoyable and meaningful time to him is that spent exploring and researching molecular biology. As a three-time National Science "Bowler," National Science Olympian, and an AIME finalist, Stephen has embraced his "inner geek." He is excited to return to National Science Bowl®, and hopes to learn several new factoids and meet enthusiastic scientific minds. Joe Reardon is a senior. Alex Sokolovsky is a senior with a series of achievements under his belt. Receiving much recognition in his biological prowess, Alex has spent much time increasing his knowledge of the field. As a participant in the National Science Olympiad Team, Alex is proud of his aptitudes in robotics, electronics, and the science of fitness. He is bilingual, fluently conversing in both English and Russian. In his free time, he enjoys playing tennis and watching Japanese animation. A hard working student, he is an amateur computer engineer, designing both private computers and systems for his high school. Although uncertain of his future plans, his curiosity in psychology will certainly lead him to focus on cognitive sciences at his future college. Michael Steinhaus, senior, likes physics and chemistry. Among his extracurricular activities are baseball team, swimming team, yearbook, Scholar Bowl, and singing. He has volunteered for Special Olympics for four years. He will be attending Harvard University next year. He has no idea what he will study. He plays a mean game of Texas Hold 'em.

# Peter Johansen High School – Modesto, California Modesto Irrigation District



Left to right: Katie Negranza, Ken Stuart, Andrew Zellman, Eve Meyer, Jerry Vin, Dan Iverson (Coach)

*Team Coach:* **Daniel Iverson** teaches AP Chemistry and Honors Chemistry at Peter Johansen High School, and has been teaching science for the past 25 years. He has a B.S. degree from Evangel University in biology with minors in chemistry and psychology. He greatly enjoys the outdoors by camping, riding horses, and fishing. He also enjoys his pastimes of playing the guitar, working in his shop, and reading. Current interests in science involve the subject of irreducible complexity and the fine tuning of the universe as represented by the scientists found in the book written by former Chicago Tribune legal affairs journalist, Lee Strobel, *The Case for the Creator*.

Team Members: Eve Meyer ("Miss Vice Captain") is a senior; this is Eve's first year in Science Bowl but she has made an enormous impact on the team. While she thinks she may not actually know anything, she likes to think her charm has the innate ability to distract the members of the opposite team. She spends most of her time gazing off into the distance, with thoughts of shoes, fairies, and figuring out how she will possibly make friends at Harvard next fall. There she aspires to study astrophysics and go on to become an astronaut. Eve also plays an important role on the school's Mock Trial Team, contending for the state championship. Katie Negranza ("The Ninja") is a senior; Katie is also a National Science Bowl® greenhorn. In her free time, Katie enjoys being picked on by fellow team member, Jerry, and stealthy ninja night raids. Do not be fooled by her quiet demeanor because she morphs into a pit bull during competition. She also is the captain of the Johansen Science Olympiad Team. She plans to study to become a pharmacist at the University of the Pacific in Stockton, CA. Kenneth Stuart ("The Token Freshman") is a junior attending the National Science Bowl® for the first time. In his free time, Kenny's life is centered around two pieces of plastic affectionately called GameCube and XBox. He enjoys science (really?!?!) in its every form and hopes it will be a constant presence in his life. However, as he is scared of commitment, he does not know where he will be going to college, but he hopes they exchange AP classes for credits. Jerry Vin ("El Magnifico"), a senior, was recently transported to the local Emergency Room after puncturing his hand while slapping down on a Science Bowl buzzer with far too much force. During his free time, Jerry likes to complain about his computer, shred his guitar, exercise his buzzer arm, and pick on fellow teammate, Katie. He is also responsible for the maiming of several individuals by giving overzealous congratulatory high fives. Andrew Zellman ("El Capitan") is a senior and the only returning member from last year's team at Nationals; he leads the Vikings with his poise, charisma, and devilish good looks. In his free time, Andrew enjoys rock climbing; playing Ultimate Frisbee; watching soccer games (especially girls); and playing electric bass, low brass, and many percussion instruments. Andrew, who has always excelled in math and science, hopes to pursue a career in networking. He will be sharing his talents with his fellow classmates as he majors in computer science at Whitworth College in Spokane, WA next year.

#### Pullman High School – Pullman, Washington Pacific Northwest Site Office



Left to right: Barbara Harding (Coach), Amos Chen, Brian Yin, Nicholas Shaw, Angelena Weddell, Ingmar Saberi

Team Coach: Barbara Clark Harding received a B.S. in chemistry from Allegheny College. She has taught at levels ranging from middle school to university, and she has worked as a research chemist. She spent over ten years as the lecture-demonstrator for the Department of Chemistry at Washington State University, doing the fun "magic" that kept the large lecture classes awake. Since 1996, she has taught chemistry and other science and math classes at Pullman High School, where she also coaches the Knowledge Bowl Team. Barbara and her husband enjoy the outdoors, particularly hiking and skiing. Their house is in a constant state of remodeling now that their two children are grown. This is the fourth year her team has represented their region at Science Bowl.

Team Members: Amos Chen is a senior who hopes you appreciate that he is giving up Prom in favor of the National Science Bowl®. This is Amos' second trip to Nationals as team captain. Outside of class, Amos splits his time between tennis and violin. Amos has been named a National Merit Finalist. He worked on a new drug for treatment of Alzheimer's disease as his senior project, and he intends to pursue a career in pharmaceutical research and development. However, keep in mind that many of Amos' defining life choices have been motivated by his desire for free chocolate cheesecake. Ingmar Saberi, a sophomore, is coming to Washington, D.C., for the second time in as many years, and has yet to introduce a motion in Congress. He enjoys physics, old movies, and a really good bagel. He recently qualified as a semifinalist for the 2005 U.S. Physics Team. He is also enamored of chess, outdoorsy stuff, and anything involving a deck of cards. Senior Nicholas Shaw is a member of Procrastinators Anonymous; he plays piano, when he finally gets around to it. He has been a member of Math Team since 6th grade (even though he does not enjoy doing his math homework). He sails with his dad in the summer, and skis with his mom in the winter. He plays soccer with enthusiasm, not skill, and swims the other way around. He is planning on attending a state school, due in large part to the aforementioned problem. He was captain of the team that was third at Regionals last year; this is his first trip to Nationals. Angelena Weddell, a senior, would like to work in a diamond mine in South Africa; sail around the world on her great-uncle's ship, Lady Frances; sit in a room and write stories, anti-stories, starries, and haiku pops; and hitchhike across the country following the route of Jack Kerouac (her idol) in On The Road. Should any of these plans fall through, she can always go to college and study engineering. Meanwhile, you can catch Angie in a supporting role on the television show, "Renée's Way," premiering soon on a corporate network near you! This is her second trip to Nationals. Brian Yin is a senior and a National Merit Finalist. His academic interests are in mathematics and economics. After graduating, he plans to grow at least another three inches and fall hopelessly into debt trying to fund his college education. He also plans to be the first Chinese-American President of the United States. His vice president has been decided upon, but he is still accepting applications for various Cabinet positions. Applicants should submit a resume and a generous contribution to his campaign.

#### Randolph School – Huntsville, Alabama Alabama School of Math and Science



Left to right: Dr. Garvin Wattuhewa (Coordinator), James Plunkett, Chenxia Liu, Sachin Kapoor, John Gipson, Meryal Smith (Coach), Dr. Jane Ellis (President/ASMS); Not pictured: Sean Parker

Team Coach: Meryal Smith earned a B.S. from Louisiana State University and an M.Ed. from Alabama A&M in science education. She has been a chemistry teacher for 37 years, 6 of those at Randolph School teaching Honors Chemistry and Advanced Placement Chemistry. She also coaches the Science Olympiad Team and sponsors the Science Club. She was influenced to pursue a career in teaching by her great-grandmother and her freshman college chemistry professor. She has done research with rocket fuels and corrosion of metals at Redstone Arsenal for four summers. She thinks the three most important scientific discoveries are: the human genome project, antibiotics, and transistors. Coach Smith's hobbies are traveling, gardening, and reading.

Team Members: John Gipson, Jr. is a senior whose favorite subjects include physics and computer science. He is the president of Mu Alpha Theta, and is active in First Priority, Science Olympiad, Math Team, and Scholars' Bowl. He is a National Merit Finalist. He also attends three weekly Bible studies, one of which he leads. Though at this time he is undecided about what college he is going to attend, he is planning to major in electrical engineering, and would eventually like to take over the world. Sachin Kapoor is a senior who plans to major in mathematics or physics. He is a member of the Science Olympiad Team, the National Honor Society, and the Scholars' Bowl Team. He is president of the Habitat for Humanity Club and is also a National Merit Finalist. Sachin also enjoys computer games. Chenxia Liu is a junior who enjoys the sciences, especially chemistry and physics. She has been a member of both Science Olympiad and Science Bowl for the past two years, and is also a member of Student Government Association. She plays both the piano and the violin, and was a member of a local youth orchestra. She plans to pursue her interest in science after high school at a small private college or a liberal arts college. Sean Parker is a senior who is involved in Science Olympiad and Scholars' Bowl. He is the Editor-in-Chief of the school newspaper and the president of the Red Cross Club and Foreign Language Club. He is the vice president of the Science Club, treasurer of the Senior Class, and treasurer of the National Honor Society. He is also the president of Huntsville Hospital's Medical Venturing program. Sean volunteers with and is the 2nd co-chair of the Huntsville Red Cross Youth Committee. He also volunteers at UCLA Medical Center every summer. He is a National Merit Finalist. Junior James Plunkett, Jr. is a member of the Science Bowl, Science Olympiad, Scholars' Bowl, Physics, and Math Teams. He also plays on the tennis team, writes for the school newspaper, and serves as the Literary Magazine Editor. Outside of school, he is a member of First Baptist Church's Youth Group and sings in the Youth Choir. He enjoys hammering keys or strings on the organ, piano, guitar, and mandolin and hammering nails for Habitat for Humanity.



#### Rapid City Central High School – Rapid City, South Dakota WAPA – Huron



Left to right: Gabe Rensch, Laura Hamm, Josh Swanson, Jacob Boschee, Michael Slaback (Coach)

Team Coach: Michael J. Slaback has been at Central High School for nine years. Currently he advises the Knowledge Bowl Team, coordinates the school for the Chadron Inter-High School competition, compiles stats for the football team, and works one-on-one with the school's most reluctant scholars. He also works part-time with Stepping Stones as an Independent Living Specialist helping to transition troubled youth into independent living. During the summertime, he is a job coach with the school system working with special education students. In his spare time he collects vampire movies.

Team Members: Junior Jacob Boschee's favorite subjects are science and math, and he is currently taking AP Calculus. He is the Quartermaster of his Boy Scout Troop. Jacob plans on attending the South Dakota School of Mines and Technology, where he will major in physics and computer science. It has been his dream to work at the Jet Propulsion Lab and help develop new space travel methods. In his free time, he socializes and plays "Magic, The Gathering." Laura Hamm, a junior, is a National Honor Society member. She is also active in Knowledge Bowl and the Rocketry Team. She volunteers for the Bright Start Literacy program. Laura plans to attend Baylor University and major in pre-forensic science. Sophomore Gabe Rensch is a dedicated student who enjoys math, science, and the social sciences. In his free time, he likes to work with computers and hang out with his friends. His favorite movies are Blazing Saddles, The Matrix, and Donnie Darko. Joshua Swanson is a junior who deeply enjoys math. He has been involved in the West River Math Competition and won first place in Advanced Mathematics. He also has participated in the Chadron Inter-High School Scholastic Competition, winning Algebra 2, Advanced Mathematics, and Computer Science. Josh is an avid Visual Basic (6.0) programmer and enjoys computers in general. For recreation, he plays computer games or the piano. His epitaph may include "Chess is a sport," to settle a long-time argument with a friend.

#### Renaissance High School – Detroit, Michigan NOBCChE – Midwest Region



Team Coach: Cynthia Bridges has been teaching at Renaissance High School (National Blue Ribbon School) for 14 years. She teaches Integrated Natural Science (INS), Advanced Chemistry, and AP Chemistry. She is a graduate of both Clark Atlanta University, where she obtained a B.S. in chemistry, and the University of Massachusetts, where she obtained her M.Ed. Her decision to teach stemmed from her desire to see more minorities pursue a chemistry major. In addition to teaching, this devout Christian is the Youth Director at her church. She is the proud mother of two boys. Her hobbies include bowling, aerobics, skiing, and arts and crafts.

Team Members: Shaundra Crittenden is a senior. Jonathan Hartsfield is a junior who is a community volunteer through the Detroit Urban League, of which he is a member. He is also a member of the Renaissance High School Chess Team. Jonathan plans to major in education or business management at Florida A&M University. In his spare time, he occupies himself with ping pong and reading. Renee Rosier is a junior who is hard-working and expects much of herself. She is currently captain of the soccer team. She plans on attending the University of Michigan. Melissa Seaton, a junior, is an extremely motivated individual whose passion for science can be seen both in and out of school. She is a member of the Engineering Club, vice president of the Environmental Club, and member of the tennis team. Melissa plans on majoring in environmental science at the University of Michigan. Whitney Tarver, a senior, has received numerous awards in National Honor Society, Varsity track and field, cheerleading, cross country, and dance. She is also an active participant in the local sorority Gamma Phi Delta, her church choir, and Next Vision Lead to Succeed foundation. Moreover, her leadership skills are exhibited through her involvement in her extracurricular activities. In her spare time, Whitney loves to meditate, go to church, read, and hang out with family and friends.

# Santa Monica High School – Santa Monica, California Jet Propulsion Laboratory



Left to right: Kim Lievense (JPL Coordinator), Areeb Pirani, Jesse Zaretsky, ZeNan Chang, Bennett Rankin, Ingo Gaida

Team Coach: **Ingo Gaida** earned his B.S. in biology, M.S. in biology, and M.Ed. all from UCLA. He has taught a wide array of subjects during his 12 years at Santa Monica High, and is currently teaching AP Biology, Marine Biology, AP Statistics, AP Art History, AP Psychology, and Economics. He has the pleasure once again this year of taking both his Science Bowl and Ocean Sciences Bowl Teams to the national competitions. He believes the three most important scientific discoveries are, in order: TiVo, Einstein's theories of relativity, and quantum mechanics. His hobbies include hiking, traveling, reading, and exploring the marine environment.

Team Members: ZeNan Chang, junior, enjoys playing the violin, eating new foods, and talking with his pre-WWII grandmother. One of ZeNan's favorite activities is going on adventures in Taiwanese night markets and tasting the different variations of popular dishes. After taking the USAMO, ZeNan went to Australia last summer and came home five grams of gold richer, personally handed to him by the Governor of Queensland, Her Excellency Ms. Quentin Bryce, for the International Biology Olympiad. Areeb Pirani, senior, is a venerable, Japanese-speaking, Pakistani gentleman. On his way to the Wharton School of Business in the fall, he aspires to be on the "Amazing Race," and with his million dollar winnings he plans to purchase his own island in the Caribbean. He hopes to, no, will, retire by age 35. He enjoys potatoes in all their forms: baked, fried, sauteed, double-stuffed, au gratin, roasted, mashed, and, last but not least, hashed. Bennett Rankin, sophomore, aspires to go to Berkeley one day, and is a co-founder of his school's Kickball Club, Badminton Club, Literature Club, and the Santa Monica High Solar Alliance. He spends his spare time writing out the periodic table and pondering theoretical physics. Jesse Zaretsky, senior, enjoys studying astronomy as a hobby, in addition to biology and chemistry. He is a member of the Varsity tennis team, and is also a violinist in the Santa Monica High School Symphony Orchestra, which took 1st place at the NSOA National Orchestra Festival this year. His hobbies include bodyboarding and philosophical debate. Jesse would like to attend either UCLA or Caltech, and plans to do medical research in microbiology/virology.

#### Skyview High School – Vancouver, Washington Bonneville Power Administration



Left to right: Michelle Davis, Carol Ramsey (Coach), Kunal Vaswani, Pavan Vaswani, Thomas Chen

Team Coach: A graduate of Portland State University with a B.S. and M.S.T. in biology, **Carol Ramsey** has taught in junior high and high school for a total of 34 years, with classes in biology, life science, health, human anatomy, geology, earth science, general science, meteorology, oceanography, astronomy, and physics. Originally planning to pursue veterinary medicine, she has found that teaching has turned out to be her fulfilling career. She considers Newton's laws, Maxwell's equations, and the structure of DNA to be the three most important discoveries of science. She fulfills her love of animals with dogs in obedience and horses in horse shows where she competes in a variety of classes from driving to jumping, as well as competitive trail rides. In addition, she enjoys reading and painting.

Team Members: Thomas Chen is a senior who has been involved in science research since his freshman year. He has won awards at the Intel International Science and Engineering Fair, and was also a finalist for the Siemens Westinghouse competition. Thomas plans on continuing to pursue his research on atmospheric mathematical modeling at Princeton University. At school, Thomas is involved in ASB, Math Team, and Knowledge Bowl; and he coaches Model United Nations for middle school students. Thomas also enjoys reading, traveling, and especially blogging during his spare time. Michelle Davis is a senior who is involved in many activities, including theater, music, and debate. She currently is a member of the following clubs: Drama Club, Knowledge Bowl, Speech and Debate, Model United Nations, Junior States of America, and Diversity Committee. After high school, she plans on attending a four-year institution where she hopes to study philosophy or medicine. In her free time, she likes reading, hanging out with friends, playing guitar, and boxing. Kunal Vaswani is a sophomore and is an active student. He participates in a variety of extracurricular activities, including SMT Leadership Council, Knowledge Bowl, Speech and Debate, Model United Nations, tennis, and Math Club. He also participates in many math competitions, including USA Mathematical Talent Search and science fairs because of his interests in mathematics and science. He plans to later attend Duke University to major in civil and architectural engineering. Kunal enjoys drawing, playing tennis, swimming, gaming on his computer and Gamecube, and spending time with friends and family. Pavan Vaswani, senior, is president of his school's Knowledge Bowl and Math Teams. He is also actively involved in Speech and Debate and Model United Nations as treasurer of those organizations. He hopes to study electrical engineering and computer science at MIT next year. He then plans to receive a Master's and Ph.D. in biomedical engineering, and pursue a career in research in that field. Despite his busy schedule, he also finds time to enjoy himself, spending time swimming, playing on the computer, and relaxing with friends and family.



#### Smoky Hill High School – Aurora, Colorado National Renewable Energy Laboratory



Left to right: Mary Bartholomew (Coach), Matthew Cline, Chris Krueger, Anthony Eskeridge, Nathan Artz, Andrew Scacco; Not pictured: Doug Driver (Coach)

Team Coaches: Mary Bartholomew, a teacher for 23 years, completed an M.S. degree in chemistry at the University of Denver. She teaches Honors and AP/IB Chemistry. Her mother, who was also a chemistry teacher, is her mentor. Her son benefits from technological developments in computers and neurology that enable him to hear with a cochlear implant. She is an advocate for individuals with a hearing loss and is the newsletter editor for Colorado Voices, published by the Alexander Graham Bell Association for the Deaf and Hard of Hearing. In her spare time she loves to read and garden. Co-coach Doug Driver is in his 10th year of teaching biology and physical science. Because of his love for the outdoors, Doug worked in sporting goods retail management. For 16 years, he enjoyed the people interaction and participation in the sports he managed such as skiing, camping, tennis, golf, and scuba. Doug taught scuba for 13 years and the experience influenced him to become an educator. Doug returned to school and earned a Bachelor's degree in science education with an emphasis in biology. At Smoky Hill, Doug is on the Staff Development Committee promoting student achievement.

Team Members: Nathan Artz is a senior returning to National Science Bowl®. He plays piano and is a soccer state champion. He is soon to meet with a certain MIT mascot (TIM), with whom he will hack. Frisbee anyone? Senior Matt Cline is attending the National Science Bowl® competition for the first time. He enjoys all forms of bowling, including Science Bowl, Ocean Bowl, Knowledge Bowl, and ten-pin. Matt plays Ultimate Frisbee on a spring league in Denver. He is passionate about high-energy collisions and is fascinated by their massive destructive force. He also likes ska music. Senior Anthony Eskridge is at the National Science Bowl® competition for the third time in a row. He likes lacrosse, Ultimate Frisbee, Chipotle, ska, chemistry, and loud music. An accomplished musician, he plays alto sax in his ska band and various school ensembles. Senior Chris Krueger is attending his third National Science Bowl®. An avid Ultimate Frisbee player, he is willing to challenge any other team to a game. He is a member of three of his school's Bowl Teams: Knowledge and Ocean, as well as Science. He spends much of his time eating Chipotle burritos and playing Super Smash Bros. As a USA Biology Olympiad participant, he plans to go to China this summer for the international competition. He has postulated a theorem regarding the relationship between the checkerboard pattern and ska music, which he likes. Junior Andy Scacco is traveling to the National Science Bowl® for his second time. He enjoys math, computer science, biology, chemistry, and physics. Participating in and winning math competitions are his forte and he has qualified for the USA Math Olympiad in 8th, 9th, and 10th grade. He also enjoys tennis and Ultimate Frisbee, competes in the Science Bowl, Ocean Bowl, and Knowledge Bowl, and likes to juggle fruit, especially oranges.

# South Fremont High School – St. Anthony, Idaho U.S. Department of Energy – Idaho Operations



Left to right: Isaac Molsee, Steven Atkinson, Jared Huber, Adam Molsee; Standing: Renee Ritter (Coach), Desirae Poulsen

*Team Coach:* **Renee Ritter** teaches art and received her B.S. from Idaho State University in secondary education with an emphasis in art and psychology. She thoroughly enjoys "expanding the circle" of knowledge with students and looks forward to new opportunities.

Team Members: Steven Atkinson is a senior who has lived in St. Anthony his entire life. Steve has always honored academic achievement and, in 2001, had the privilege of representing Idaho at the National Geographic Bee. He is also a member of the National Honor Society. Senior Jared Huber loves soccer, band, and musicals. He has played the alto saxophone for six years and is learning the trombone. He is the oldest of eight children and has spent more weekends at home babysitting than he would like to admit, but loves every minute of it. Jared has also competed in Debate and Mock Trial, and likes to eat cheese and crackers. Adam Molsee, a senior, was born in Astoria, OR, and lived there until 1996, when he moved to Idaho. He was home-schooled by his mother until the 9th grade, when he began to attend South Fremont High School. He is a state champion debater and has also participated on the Mock Trial Team. He plans to attend Seattle Pacific University in the fall, where he will study psychology. Isaac Molsee is a sophomore who was also born in Astoria, OR, and moved to Idaho with his brother, Adam, in 1996. Isaac was home-schooled for eight years and is involved in cross country, track, debate, speech, and Mock Trial. Desirae Poulsen is a 17-year-old junior and has lived in Idaho all 17 years. She is the youngest of five children and is spoiled rotten. She loves learning, but not necessarily the part about attending classes. She loves to scuba dive, white water raft, hike, camp, and travel. Seeing new places is one of her favorite things, especially with her family. Desirae and her brother also enjoy snow skiing and have a blast when they are able to go.

#### Southside High School – Fort Smith, Arkansas University of Arkansas – Fort Smith



Left to right: Jon Akins, Blake Matthews, Rachel Thomas, Nic Schluterman, Matt McKnight, Josh Adams (Coach)

Team Coach: Josh Adams is in his sixth year of teaching math. He has a B.S. in physics and an M.A. in teaching focused in secondary education, both from the University of Arkansas. He believes that students should have fun while learning, and teaches and coaches in that manner. In addition to coaching Science Bowl, he also coaches Quiz Bowl, KMO, assists with the Arkansas Middle School Science Bowl, and is on the hub committee for River Valley BEST and the Frontier Trails Regional BEST. Three most important discoveries? Kevlar, penicillin, and the semiconductor.

Team Members: Jon Akins, a senior, is a National Merit Finalist. In addition to Science Bowl, he participates in Quiz Bowl, Knowledge Master Open, National Honor Society, Mu Alpha Theta, and is vice president of Astronomy Club. In his free time, he is an amateur falconer and enjoys studying theoretical astroanthropology. He has a penchant for good food and amateur competitive yodeling. He plans to attend the University of Arkansas next year, where he will major in indecision. Blake Matthews, a senior, is the oldest member of the Southside High School Science Bowl Team. He is just barely a member of National Honor Society, Mu Alpha Theta, and the Astronomy Club. His favorite classes are health and study hall, and in his spare time he plays the electric ukulele in the band "Gymnosperm" and 'pwns newbs' in the virtual world. If he graduates, he will study to be an experimental psychiatrist, an improbability physicist, or a professional beach bum. To his own amazement, he has been named National Merit Finalist, AP Scholar, and an all-around good guy. Matt McKnight, a junior, enjoys math, science and (in)sanity. Competing in MathCounts in the 8th and 9th grades, he won a few awards but suffered dearly. Due to this morale crushing, he has no plans to attend college as of yet but plans a career in chemical engineering in order to "cure the illnesses of the world." Studying Spanish and abhorring English, he would like to live one day in Havana, but would prefer Japan due to his practice in Japanese martial arts. He settles, however, for a quiet life in Arkansas as of this time. Captain Nic Schluterman, a senior and National Merit Finalist, is also captain of the cymbal line and president of the Ruth Bader Ginsburg fan club. He enjoys barefoot walks on the beach, sunsets, and Barry White. His favorite hobbies include amateur cuddling, professional horticulture, and drawing, to which he applies his unique classical Dadaist technique. Next year, he will attend the University of Arkansas, where he will study to become either a high school teacher or a wildebeest. This is his 3rd National Science Bowl<sup>®</sup>. Rachel Thomas, a senior, is a founding member of the Extreme Indoor Gardening Society, as well as an active member in National Honor Society, Mu Alpha Theta, Quiz Bowl, her youth group, and many other organizations. She also volunteers with the Backpacks for Kids program in her community. Her areas of expertise are origami, foosball, Texas Hold'em, the Beatles, and ancient Yiddish literature. She plans on attending the University of Arkansas and will major in biochemistry.

#### St. Anthony Village High School – St. Anthony, Minnesota Minnesota Academy of Science



Left to right: Mary Henle (Coach), James Benhardus, Jennifer Jaszewski, Martin Barrett, James Myhrman

Team Coach: Mary Henle has an M.A. degree in curriculum and instruction from the University of St. Thomas, having majored in chemistry and distributive science at Gustavus Adolphus College. She has taught chemistry, astronomy, and physical science at St. Anthony Village High School for 15 years. In addition to her teaching experience, she spent several years working as a technical writer and configuration analyst in the Aerospace Division of Control Data Corporation. Her hobbies include singing in a women's barbershop quartet and chorus, and spending time at home with her husband and nine-year-old son.

Team Members: Martin Barrett is a senior with an interest in math and science. He has been active as a Boy Scout and is currently working on his Eagle Scout project. He is planning to study computer engineering at the University of Wisconsin, Madison. His hobbies include singing, playing the guitar, and writing computer programs. Sophomore James Benhardus has been in Science Bowl for two years and Knowledge Bowl for three years, as well as playing oboe in the band and performing in the high school plays for the last two years. His favorite subjects are math and science, and he would like to major in physics when he goes to college. Jennifer Jaszewski is a senior whose favorite subjects are history and literature. She has been in Science Bowl for two years, Knowledge Bowl for two years, and Varsity swimming for four years. She is vice president of National Honor Society and is currently involved in post-secondary studies at the University of Minnesota, where next year she will formally attend to study classical archaeology. James Myhrman is a senior who enjoys physics and mathematics. He also participated in Knowledge Bowl. Someday he would like to be a musician.



# State College Area High School – State College, Pennsylvania National Energy Technology Laboratory – Pittsburgh



Left to right: Julie Gittings (Coach), Therese Jones, Ylaine Gerardin, Barry Liu, Lilas Soukup (Coordinator); Seated: John Lesieutre, Francois Greer

Team Coach: Julie Gittings has been an academic teams coach at State High from her early days of Scholastic Quiz in the 1970s. Advising and transporting various Knowledge Masters, Science Olympiad, Academic Decathlon, and Science Bowl Teams adds excitement to her professional life. In an earlier search for truth, she earned two degrees in English literature from Penn State, completing some graduate work at Northwestern University and Southern Utah State. She is married with two daughters: one an Ultimate Frisbee playing graduate of Carleton College recently married and finishing graduate school in hydrogeology at the University of Wisconsin, Madison; and the other a soccer playing, bio-engineering sophomore at Northwestern University.

Team Members: Ylaine Gerardin is a junior. Her favorite classes include French and American History. She sings second soprano and has also studied the clarinet and violin for seven years. Ylaine enjoys competing as a member of the State High Knowledge Masters Team. Outside of school, she is a student of classical ballet, pointe, and modern dance. She is a teaching assistant at a local dance studio, where she helps lead the Children's Beginning Ballet class. Francois Greer, currently a sophomore, participates in several extracurricular activities, including Chess Club and Knowledge Masters/Quiz Bowl. He enjoys playing chess in local tournaments, as well as teaching younger students rules and strategy. Outside of his academic life, he plays the piano in local recitals and competitions and studies under a Penn State University professor. Lastly, he is a member of his school's Varsity tennis team, a sport that takes up much of his time in the spring months. Therese Jones, a senior, is known by her friends and worshipful admirers as "Team T" for her mad volleyball skills. She has spent four seasons on the high school volleyball squad, and as captain, led the team to a third place finish at the state competition. Therese also enjoys running, and has participated in the 3200m, 1600m, 400m, long jump, and triple jump at the district championships, placing in the 3200m and 1600m. A well-rounded athlete, she has done a variety of other sports, including tennis, basketball, field hockey, soccer, softball, gymnastics, rock climbing, squash, and racquetball. John Lesieutre is a senior who is not sure where he will go to college but anticipates majoring in math. His favorite hobby is chess, which he plays far more frequently than he should. He is also interested in linguistics and has studied a number of languages, including Russian, Latin, Chinese, and Esperanto. Quiz Bowl is his other main academic competition. Sophomore Barry Liu was born in China and moved to the United States at age three. He likes reading, watching TV, playing chess, and playing computer games, the latter of which occupies most of his time. Barry's favorite music is rock, and his favorite band is Green Day.

#### St. Croix Educational Complex – Kingshill, Virgin Islands Virgin Islands Department of Education



Left to right: Joann Lewis (Coach), Victor Browne, Tashima Lambert, Tryphena Cuffy, Saskia Corke, Rashida Rawlins

Team Coach: **Joann Lewis** earned a B.S. in biology at Barry University. She has been a teacher at the St. Croix Educational Complex for seven years. She also coaches the School's Academic Quiz Bowl Team. Her influences to become a science teacher were the amazing efforts of her middle and high school science teachers. Her hobbies include reading, watching game shows, cooking, and traveling. Her three most important scientific discoveries are: cloning the Internet, and cancer chemotherapeutic drugs.

Team Members: Victor Browne, Jr. is a freshman whose interests include math, science, and journalism. His hobbies are reading, writing, and playing video games. He plans to major in the field of physical science and is undecided as to which college to attend. Saskia Corke is a sophomore whose favorite subjects include world history, astronomy, marine biology, and fine arts. Her extracurricular activities consist of the National Art Honor Society and the Complex Barracuda's soccer team. Her honors include being salutatorian of her Junior High School Class and receiving second place in the Congressional Art Competition in 2004. Her future educational plans are to attend either the School of Visual Arts or Fashion Institute of Technology in New York, University of Southern California, or Oxford University. However, her interests in many subjects make it difficult for her to decide on a definite major. Tryphena Cuffy is a senior and the captain of the St. Croix Educational Complex High School's Quiz Bowl Team. She has been the president of the school's Bible Club, vice president of the Medical Explorers Club, youth representative of her church, and a Red Cross Junior volunteer. She is a National Honor Society member whose aspiration is to become a cardio-thoracic surgeon. She lives by the scripture Psalms 30:5, which states, "Weeping may endure for a night, but joy cometh in the morning." Tashima E. Lambert is a junior whose favorite subject is math. Her extracurricular activities include Quiz Bowl, National Honor Society, Future Business Leaders of America, and Student Government Association; and she is the president of the Class of 2006. Tashima is a part of the magnet program and serves her community by tutoring underclassmen in math. She graduated valedictorian in both 6th and 8th grades. In the future she aspires to become a neurologist. She lives life by the motto, "Seek ye first the kingdom of God and his righteousness, and all things shall be added unto you." Junior Rashida Rawlins plays the role as a Junior Class Advisor. She was class valedictorian in her 6th and 8th grade years. Her favorite subjects are science and history. Rashida is also a member of the school's softball team and vice president of her church's youth group. She is an esteemed volunteer at the Queen Louise Home for Children. Her hobbies are reading and playing along with the game show "Jeopardy." Her future goals are to attend Liberty University or Lincoln University to major in chemistry and/or journalism. Her motto is, "Know thyself" (Socrates).

# Stockdale High School – Bakersfield, California California State University



Left to right: Miles Muzio, Casey Stark, John Scott, Howard Noz, Matthew Johnson, John Dukellis, Stacy Baehr (Coach), Tahira Mohammed (Coach), Tom Meyer (Coordinator)

Team Coaches: Stacy Baehr earned her B.S. in geology at the California State University in Bakersfield. She has been a teacher for nine years, all of which have been at Stockdale High School. Prior to becoming a teacher, she worked as an environmental consultant managing soil and groundwater remediation projects. She thinks the three most important scientific discoveries are: nuclear fission, radiometric dating, and determining the structure of DNA. In addition to coaching Science Bowl, Coach Baehr enjoys traveling, reading, and spending as much time as possible at the beach. Tahira Mohammed earned her B.S. in chemistry and biochemistry from the University of the West Indies. Her postgraduate work focused on the teaching of science and misconceptions in chemistry. She began her teaching career 22 years ago in her native Trinidad, where she worked for 13 years. In California, she has worked for nine years at Stockdale High School. She believes that the most important discovery in science is mapping the human genome. Coach Mohammed spends her free time as a devoted soccer mom who loves to cook.

Team Members: John Dukellis, a junior, is very pleased to be a member of Stockdale's Science Bowl Team. He plays in the jazz and symphonic bands and also played in marching band this past fall. John enjoys studying the sciences, particularly zoology and physics. He hopes to continue studying the sciences in college and pursue a degree in the field of engineering. He is very excited about being able to participate in the National Science Bowl® and wishes his team good luck! Matthew Johnson, a senior, thinks Science Bowl is really keen. A National Merit Finalist and AP Student, he still manages to find time for pleasure as an avid reader of science fiction, as a summer-time sailor on the Argus, and more. Matt would love nothing more than to become a biological engineer and spend his time making life better for everyone. Howard Noz, a junior, has his goal set for a Ph.D. degree in math or physics. His favorite subjects are math, physics, and chemistry. Howard is vice president of the Math Club and tutors students at Stockdale HS and Bakersfield HS. He is an active member of the Chess Club and Science Club. He enjoys playing chess, soccer, and computer games, and reading. He participates in church community activities. He is an AYSO and USSF certified soccer referee and troop leader of his Scout troop. John Scott, a senior, is very pleased to be a part of Stockdale's Science Bowl Team. Besides Science Bowl, he is also part of the Math Club, Science Club, and Cooking Club. He plans to pursue a career in geological engineering. John would like to express thanks to his coaches for all the time they have invested in helping him succeed. Casey Stark, sophomore, is fascinated with the study of computers and modern physics, mainly string theory. In addition to Science Bowl, Casey is involved in his school's Key Club and is an accomplished percussionist in orchestra, wind symphony, and jazz band. He is also a member of Stockdale's Math Bowl and took first place in the Computer Programming Contest this year.

# Sycamore High School – Cincinnati, Ohio Fernald Closure Project



Left to right: Cindy Parrott (Coach), Joshua Lee, Shriya Raghavan, Aaron Friedman, Arthur Wang, Ahilan Sivaganesan

Team Coach: Cindy Parrott earned a B.S. and M.Ed. from Miami University and is the science supervisor at Sycamore. Cindy has taught for 23 years and currently teaches physics. Beside Science Bowl, she also coaches the Ocean Science Bowl Team. Cindy and her husband have three children, ages 18, 15, and 13. Cindy loves music and watching her children in their various activities.

Team Members: Aaron Friedman is a senior with a wide variety of interests. Besides participating in Science Bowl, Aaron is the captain of the Academic Team, the Religious and Cultural Vice President of his synagogue's youth group, and he sings in three extracurricular choirs. He is also a National Merit Finalist. In college, Aaron plans on studying either biochemistry or biomedical engineering and earning a Ph.D. in a biomedical related field. Eventually he would like to become a college professor conducting research on various diseases or a laboratory scientist developing new products for a biotechnology company. When junior Josh Lee is not destroying the competition at Science Bowl, he can be found singing in chamber choir, messing around with Linux, or even rebuilding computers for volunteer work. He is also on the school's JETS Team, and he is an active member of Scrabble Club and National Honor Society. He plans to go to college somewhere in the Midwest, and would enjoy majoring in chemistry or engineering. Shriya Raghavan is a senior whose favorite subjects are math and physics. She has been playing violin for the past twelve years and has been learning Indian classical dance for the past seven years. She is a National Merit Finalist. Shriya participates in orchestra, Science Olympiad, Academic Quiz Team, and Japanese Club. She has participated in numerous Japanese speech contests and won at the state level, earning a trip to Japan. She hopes to pursue engineering at MIT or Caltech. She is thrilled to realize her high school ambition to be at National Science Bowl®. Ahilan Sivaganesan is a senior who loves playing the piano and violin. He is the founder of Foreign Aid Club, vice president of National Honor Society and Math Club, and 1st chair viola in orchestra. He also runs cross country and is on the Varsity Quiz Team. Ahilan has done epidemiological research on obesity, helped model a Sjogren's syndrome diagnostic test, and performed genome-wide screens at Cincinnati Children's Hospital. He is a national finalist in the DuPont Challenge, National AP Scholar, National Merit Finalist, AMC-12B State winner, USAMTS Silver Medalist, and four-time AIME qualifier. Ahilan hopes to pursue medicine and public health. Arthur Wang is a senior who excels in math and science. He is an AP Scholar and AIME four-year qualifier. Arthur played first board for the Chess Team and was the league Player of the Year. Math Club and National Honor Society also take up Arthur's after school hours. Arthur is another of Sycamore's 21 National Merit Finalists, the most in any Ohio public school. With college plans still undecided, Arthur does know that he wants to study biomedical engineering.



# Terre Haute North Vigo High School – Terre Haute, Indiana Indiana State University



Left to right: Joel Dankwa, Matt Dillon, Angela Kuo, Bob Warden, Kate Pippins, John Rosene (Coach)

*Team Coach:* **John Rosene** earned a B.S. in botany in 1979 from the University of Kentucky. In 1982, he received an M.S. in plant breeding and genetics. He worked as a corn and soybean breeder for 18 years in Georgia, Pennsylvania, and Indiana. In 2001, he received a B.S. in science education from Indiana State University and began teaching at Terre Haute North High School. He enjoys gardening, camping, and car restoration.

Team Members: Joel Dankwa is a senior and a two-year member of the Science Bowl Team. His other academic competitions include Knowledge Masters and the American Math Competition. He is president of the National Honor Society and is also involved in student council, student senate, TUFF, Continentals, and track. He plans to attend medical school and become either a surgeon or geneticist. Matt Dillon is a junior and also participates in Science Olympiad and Knowledge Masters. He wants to be a physical chemist. Angela Kuo is a sophomore whose activities involve piano, violin, youth orchestra, and various academic teams. She currently has no idea what college she plans to attend, but wishes to pursue a career in medicine. Kate Pippins is a senior and a two-year member of the Science Bowl Team. Kate's favorite subjects include biology as well as anatomy and physiology. Kate has also participated in JETS, won second place at the regional science fair in her sophomore year, and is a member of the National Honor Society. Next year, she plans to attend Rose Hulman Institute of Technology and major in biomedical engineering. Kate's long-term goal is to attend medical school and specialize in orthopedic surgery. Bob Warden is a senior and captain of the Science Bowl Team. This is Bob's second year on the team. Other academic activities and competitions include Knowledge Masters, Indiana Math League, Varsity JETS Team, Science Fair, and National Latin Exam. In addition, he is a member of the National Honor Society and a four-year member of the track team. After graduation, Bob plans to attend Rose Hulman Institute of Technology for a degree in mechanical engineering with a focus on aerospace.

#### The Chickasaw Nation – Ada, Oklahoma Institute for Sustainable Development

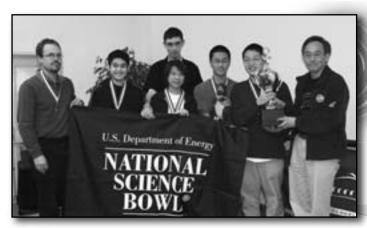


Left to right: Rha Shonda Keehn, Josh Boggs, Randi Howard, David Scott, Jess Lam; Standing: Randy Shackleford (Coach); Not pictured: Waylon Cotanny (Coach)

Team Coach: Waylon Cotanny is a member of the Seminole Nation Tribe. He earned his undergraduate degree in education/ physical education at East Central University of Ada, OK. Upon graduation, he began employment as the Johnson O'Malley Specialist for The Chickasaw Nation of Ada, OK, but now serves as the Johnson O'Malley Coordinator for The Chickasaw Nation. The Chickasaw Nation Johnson O'Malley program provides services to over 6,000 Native American students in its thirteen county service area. In his spare time, he enjoys spending time with his family and participates in softball, basketball, and stickball.

Team Members: Joshua Boggs is a junior at Wapanucka High School. He is active in FFA, where he was elected as the chapter Sentinel. He is also active in basketball, Mock Trial, Academic Team, gifted and talented, and FCA. This past summer, Josh attended the Chickasaw Nation Entrepreneurship Camp, where his business idea was chosen most likely to succeed. In his freshmen year, he was in the science fair, with the idea that tomatoes would grow better if fed Coca Cola instead of water. His idea was right. He has attended Falls Creek ever since the 7th grade and helped design the best overall design for the Falls Creek T-shirt. Josh is a member of the Chickasaw Tribe. Randi Howard is a senior at Ada High School in Ada, OK. Her favorite subject is math. She is involved in Student Council, Science Club, Spanish Club, Fellowship of Christian Athletes, Native American Club, and Ada High Advanced Leadership. She also volunteers for many of the community organizations. Randi plans to major in biology. Her career goal is to become a radiologist. Randi is also a member of the Chickasaw Tribe. Rha Shonda Keehn is a junior at Madill High School who loves writing and English literature. She is president of SADD, reporter of BETA, and last year was president of the Math and Science Club. She is also involved in National Honor Society, Speech Team, Academic Team, Model UN, and Girl Scouts. She plans to go to Southeastern Oklahoma State University to major in business and minor in creative writing. She is still unsure of what career path she will take, but she knows she wants to write with her spare time. Rha Shonda is also a member of the Chickasaw Tribe. Jess Lam is a junior at Pauls Valley High School. His favorite subjects are physics, calculus, and American history. He is the captain of the Varsity tennis team, 4-H officer for the past five years, a member of the National Honor Society, has received awards in Algebra I, Geometry, Algebra II, Trigonometry, Chemistry and Physical Science, and also is a member of his school's state qualifying Academic Team. He was accepted to the regional school of Science and Mathematics. Jess is also an officer in FFA. His future plans include attending a prestigious four-year college specializing in sports medicine. Jess is a member of the Choctaw Tribe. David Scott is a sophomore from Ada High School. He is a student with a well-diversified schedule, with classes ranging from biology to Spanish to athletics. He does well in all his classes, but even with all his hard work in the classroom, he has still found time to complete more than 25 hours of community service halfway through his sophomore year. Whenever he has some time to relax, he enjoys writing poetry. He is a member of the Choctaw Nation.

#### The Harker School – San Jose, California Lawrence Berkeley National Laboratory



Left to right: Robbie Korin (Coach), Jasper Shau, Lev Pisarsky, Hann-Shuin Yew, Mason Liang, Yi Sun, Dr. Chu

*Team Coach:* **Robbie Korin** has a degree from Montana State University in chemistry and has been teaching all levels of that subject, including AP, for seventeen years. He has coached Science Bowl since the beginning of the event at three different high schools.

Team Members: Mason Liang is a senior. In addition to math and science, he also enjoys learning about history and Japanese. Since someone is going to ask, he does not know what college he will be going to, but he will by the time this is distributed. In his free time, he makes pots and solders. He has a younger brother called Spencer, and a pet dinosaur named Rexxar. Lev Pisarsky is a senior. He enjoys chess and has been an active participant on Harker's Quiz and Science Bowl Teams. Jasper Shau is a junior. He enjoys all academic subjects; however, chemistry is by far his favorite. Yi Sun, junior, is competing in Science Bowl for his third year, his second at Nationals. Last year, he won a Gold Medal at the International Physics Olympiad in Korea. Furthermore, Yi attended the Math Olympiad Program for the third year, winning an Honorable Mention in the USA Math Olympiad and a Silver Medal in the Asian Pacific Math Olympiad. He also participates in the Chemistry, Biology, and Computer Science Olympiads. Yi is captain of the Quiz Bowl Team and a member of the swimming team. His hobbies include listening to trance music and reading an eclectic mix of literature. Hann-Shuin Yew is a junior who is utterly obsessed with cell and molecular biology. She plans to study that subject in college and dreams of becoming a (what else?) molecular biologist when she grows up. Her other interests (besides gazing at her stuffed microbe collection) include British literature, Chinese history, and just life in general. Hann is currently hooked onto crossword puzzles and origami and will happily fold you a crane if you ask nicely. She prefers to think that the glass is half full, but would rather drink from the cup in question than wrangle pointlessly over it.

## Thomas Jefferson High School for Science & Technology – Alexandria, Virginia Thomas Jefferson National Accelerator Facility



Left to right, front row: Sharon Baker (Coach), Charlotte Seid, Sam Lederer, Lisa Marrone; Back row: Matthew Isakowitz, Logan Kearsley

Team Coach: Sharon Baker teaches mathematics at Thomas Jefferson High School for Science & Technology (TJ). She graduated from the University of Virginia (UVA) in Charlottesville with a B.A. in mathematics and an M.Ed. in mathematics education. An enthusiastic mathematics professor at UVA inspired Ms. Baker to pursue mathematics as a major and ultimately to consider teaching. She was a semifinalist last year in the NASA selection of educator astronauts. She sponsors the Fellowship of Christian Athletes and Science Bowl Clubs at TJ. Her hobbies include skiing, travel, and music.

Team Members: Astronomy and space exploration are senior Matthew Isakowitz's passions. He enjoys looking at the stars and planets from his backyard and volunteering for the X Prize Foundation, which promotes private space travel. His other passion provides for an unusual contrast: he loves the ancients and Latin, winning 1st place in the state of Virginia on the Classical Association of Virginia's Latin III exam. He spends some of his free time playing Joplin and Bach, as he has taken private piano lessons for the last ten years. Matthew plans to attend MIT and major in aerospace engineering. Sophomore Logan Kearsley's favorite subjects are computer science, biology, and physics. He is the co-president of the TJ Science Fiction Writers' Club, a team captain in the TJ Robotics Club, and a regular attendee of the Dead Parrot Society, the school's comedy club. For the past few years, he has helped set up computers at elementary and middle schools at the end of the summer. He is currently planning on attending either MIT or BYU with a major in either computer science or physics, and is considering potential careers in robotics, programming, and physics research. Sam Lederer, a senior, is a National Merit Semifinalist and an AP scholar of some sort who captains his school's Physics, Academic, and Science Bowl Teams; plays violin in the school orchestra; enjoys Shakespearean tragedy, Bob Dylan, gourmet cooking, table tennis, the Beatles, complex analysis, J.S. Bach, sarcasm, Kant, physics, and occasional sleep; intends to major in physics and dabble in mathematics at Harvard; and who nearly disregarded the requirements for this biography by writing a fragment instead of a sentence. Lisa Marrone, a junior, is a returning Science Bowl and Ocean Bowl finalist. Her primary interest is in biophysics. Lisa is president and founder of her school's Biotechnology Club, a Biology Olympiad Semifinalist, co-coordinator of TWIST (Tomorrow's Women in Science and Technology), and a prominent member of her school's Varsity Math Team. This year, Lisa had the privilege of introducing Dr. Francis Collins, director of the Human Genome Research Project, at a school-wide assembly and had lunch with Dr. Thomas Chec, recipient of the Nobel Prize in Chemistry in 1989. In her free time, Lisa enjoys playing tennis and the violin. Junior Charlotte Seid's favorite subjects include biology and chemistry. She is president of the Entomology Club, secretary of TJ GEMS (Girls in Engineering, Math, and Science), and publicity co-coordinator of TWIST. In addition to Science Bowl, she participates in "It's Academic" and the Biology Olympiad, and her hobbies include drawing and SCUBA diving. She has volunteered at the Smithsonian Institution and as a biological stream monitor for Fairfax County, VA. She hopes to pursue a career in marine biology or veterinary medicine.



# Thomas S. Wootton High School – Rockville, Maryland U.S. Department of Energy – Headquarters

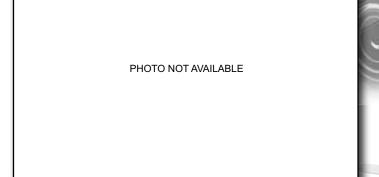


Left to right: David Farkas, Tessa Carducci, David Chen, Bhuvan Govind, Mike Yan, Marty Patt (Coach)

Team Coach: Martin Patt attended the University of Maryland. His hobbies include discussing the Standard Model with his children Micah (5) and Jacob (3), confusing his wife Kathy with detailed physics explanations of everyday life, and sports (soccer, basketball, tennis, etc.). Coach Patt believes two very important scientific discoveries were: the medical use of antibiotics and powered flight (the latter of which is ironic because he hates to fly). Why did he get into teaching? Because he loves working with adolescents —especially members of this year's Wootton Science Bowl Team.

Team Members: Junior Tessa Carducci's favorite subjects in school are math and chemistry. She has completed internships at Tufts University and the FDA, and has had a research paper accepted for publication by Cellular Signaling. Tessa loves competing in Ocean Sciences Bowl, science fairs, Envirothon, and Physics Bowl in addition to Science Bowl. In her free time, Tessa enjoys volunteering, tutoring, photography, pottery, snowboarding, and spending time with her family and friends. She is very excited to go to Costa Rica this summer, where she will study tropical ecology. Tessa would like to pursue a career in either statistics or clinical pharmacology. Junior **David Chen** is a science-loving person who does many things, none of which are particularly good for this biography, as he realizes the rest of the biographies will put him to shame. He enjoys reading "Naruto" and "educational" books. David enjoys tennis, sushi, and pondering the significance of lightning. He loves the movie Love Actually, and, in one ambitious maneuver, felt it in both his fingers and toes. On the academic front, he tries to do math, enjoys such things as "physics," and hopes to become good enough to come back and put his science coach out of a job. David Farkas, a junior, enjoys anything and everything science-related. In addition to being a member of the Wootton Science Bowl Team, David is also a member of the math and swim teams, and is the president of the Robotics Club. He has competed in the Botball robotics competition for the past two years, and has been a part of a team placing third in the country. In addition to science, David enjoys skiing, computers, and free running. He plans to pursue a career in medicine and is interested in becoming a surgeon; and, yes ladies, he is single. Junior Bhuvan "Kenny" Govind loves his dog Jasmine and spends his spare time running outside with her. He tries to find time to play Counterstrike for Xbox and challenges anyone who thinks he or she is better than him; gamer tag: Hindurtle. He loves to eat tandoori chicken and plays MSN Messenger Minesweeper with his fellow Carebear clan although his win percentage is approaching zero (best friend: Sir Friend Bear). Other than his dog, computers, and Counterstrike, Bhuvan loves biology, enjoys studying medicine, and plans to pursue the medical field in his future. Mike Yan, a senior, is currently enjoying his last year of high school. Along with Science Bowl, he is captain of the It's "Academic Team" and is a member of the Chemathon Team. Mike is a Maryland Distinguished Scholar Finalist and a Johns Hopkins Talent Search participant. In his spare time, he loves to play sports and is also an avid computer gamer. He earnestly welcomes anyone to challenge him at HalfLife 2 or Warcraft 3. Mike will be attending Duke University this fall and is planning on majoring in biochemistry. He plans on going to medical school to become a physician.

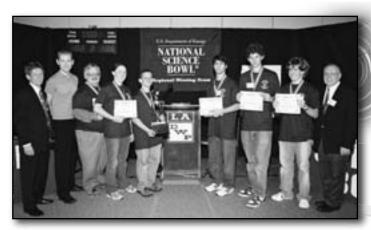
#### Timbuktu Academy – Baton Rouge, Louisiana NOBCChE – Southwest Region



*Team Coach:* **George Ware** attended Louisiana State University majoring in microbiology. After school, he began working in the petrochemical industry. He serves as a volunteer coach and mentor with The Timbuktu Academy at Southern University during his off work hours. His hobby is repairing PCs for family and friends.

Team Members: Joshua Berhane is a junior at McKinley Senior High School in Baton Rouge, LA. His favorite subjects include physics and computer science. He has been on the Timbuktu Quiz Bowl Team for several years and part of the marching band for two. He plans to attend Louisiana State University for his Bachelor's in computer science, and then attend the DigiPen Institute of Technology. Kahlia Gager is a junior enrolled in the Gifted and Talented program at McKinley Senior High School. Her favorite subjects include chemistry and trigonometry. She has been on the honor roll for all of her school years. She plays tennis, badminton, and piano. Kahlia is a member of the Beta Club, National Honor Society, McKinley High and Timbuktu Academy Quiz Bowl Teams, and Mu Alpha Theta. Kahlia has won several awards in the Louisiana Regional Science Fair, and also at the district rally. She volunteered at a center for children with special needs, and also at the concession stand at a karate tournament. Kahlia is thinking of attending either Tulane or Columbia University as a pre-medicine student. **Jerome Meyinsse** is a junior enrolled in the Gifted and Talented program at McKinley Senior High School. His two favorite subjects are math and chemistry. He plays the trumpet in the jazz and marching band. He is also a starter on the Varsity basketball team. He participates in National Honor Society, Beta Club, Key Club, and Mu Alpha Theta. Jerome plans on attending college, preferably out-of-state, playing college basketball, and would like to major in a math-related field like engineering. Sarai Stansberry is a junior at St. Joseph's Academy. Her favorite subjects are math, chemistry, and Spanish. She is a member of the Audubon Council of Girl Scouts and Venturing Scouts of America. She is the vice president of the Students for Unity Club. She is a member of Mission Outreach and the Timbuktu Summer Programs. She has participated in the NOBCChE Quiz Bowl for five years. She plans to attend college and major in pharmacology or chemistry. She intends to pursue a career in pharmacy.

### Venice High School – Los Angeles, California Los Angeles Department of Water and Power

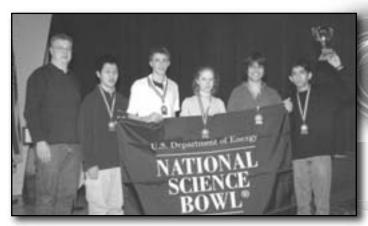


Left to right: Dr. Ed Krupp (Dir. of Griffith Observatory & Celebrity Moderator), Ryan Benicky (Hitachi), Richard Erdman (Coach), Nicole O'Keeffe, Jonah Rosenthal, Lorenzo D'Amico, Seth Rotkin, Andrew Bernstein, Walter Zeisl (LADWP Coordinator)

Team Coach: Richard Erdman has been teaching at Venice High for 35 years. During that time, he has taught AP Biology, AP Environmental Science, and AP Chemistry and is approaching 1,000 passing scores. He has coached Science Bowl for 13 years and has taken a team to Nationals 5 times, including two national championships in 1996 and 1997. He attended UCLA, became a teacher when medical school seemed unlikely, and served as an AP Chemistry Grader for five years. His choice for the most important scientific discoveries are: antibiotics, electricity, and environmentalism.

Team Members: Senior Andrew Bernstein's favorite subjects include math and science. He has always been interested in learning science and joined Venice's Science Bowl Team in his junior year. He soon found Science Bowl to be fun and exciting. He has been the class treasurer in the past, and has been co-captain of his school's Varsity tennis team for two years. Andrew also helped tutor students in the school library in math and science. He hopes to study either computer science or chemistry in college and become a research scientist. Lorenzo D'Amico is a 17-year-old senior. He has been a member of the Science Bowl Team for two years, and is also captain of the Varsity volleyball team and president of the Foreign Language and Cultural Exchange Club. Lorenzo is interested in studying bioengineering in college and hopes to enter the field of biotechnology. Nicole O'Keeffe, a senior, has been a part of the Venice Science Bowl Team since her freshman year. She will be attending MIT in the fall, where she plans to major in biomedical engineering with either a double-major or a minor in music or theater. Outside of school, she is a captain on the Venice High School swim team, where she is a three-time Los Angeles City champion. She has played the piano for ten years, has performed in four musicals with Children's Civic Light Opera, and knows at least as much about Broadway musicals as she does about science. Senior Jonah Rosenthal has actively participated in Science Bowl since his freshman year. For the last two years, he has also been an integral member of Venice's Academic Decathlon Team. He tutors students in algebra, geometry, and calculus, and is an avid geography and trivia buff. He plays clarinet and guitar and strives to read Miguel de Cervantes and Gabriel García Márquez in Spanish. In college, he plans to double major in evolutionary biology and music performance. Seth Rotkin is a senior and has been a part of the Science Bowl Team since his freshman year. He is the president of the Venice Chapter of the Junior State of America, a national debate and student government organization. Seth is very interested in computer science, and runs a Web site development company. He plans to major in computer science at a university next year.

# Ward Melville High School – East Setauket, New York Brookhaven National Laboratory



Left to right: Bob Spira (Coach), Harley Zhang, Charles Cimet, Shira Mitchell, Sam Ocko, Neal Wadhwa

Team Coach: **Bob Spira** is currently Science Chairperson, AP Physics teacher, and Physics teacher. He holds a B.S. in physics with a math minor, a Master's degree in education, and an advanced graduate certificate in school district administration. He has worked as an engineer, university professor, and entrepreneur. It was while operating one of his SUBWAY franchises that he realized that he enjoyed working with kids. He went back to school for his education certification and has loved teaching ever since. He enjoys spending time with his wife, Karen, and his children, Amanda and Kyle. Together they camp, fish, bike ride, garden, and play all sports. He considers electricity, nuclear energy, and vaccinations the three most important scientific discoveries, although he thinks three is very limited.

Team Members: Charles Cimet is a senior. Shira Mitchell is a senior. Senior Sam Ocko enjoys math and physics, and was an Intel Semifinalist. He plans to study physics at Brown, and hopes to become a mathematician or a physicist. Neal Wadhwa is a senior. Serving as the captain of the Science Bowl Team, he is also interested in mathematics and is the president of the Math Team. He has won numerous awards in mathematics and was named an Intel Science Talent Search Finalist in 2005. He also plays the piano. Harley Zhang is a junior whose favorite subject is math. He is a member of the Science Olympiad, Academic Team, Math Team, chamber orchestra, and Asian Culture Club. He currently has no plans for future education or career goals.



# West Valley High School – Cottonwood, California City of Redding Electric Utility



Left to right: Nicolas Farrell, Zachary Moen, Dan Button (Coach) Jim Feider (Electric Utility Director) Kevin Burk, Mark Mintline, Eric Andres

Team Coach: **Dan Button** earned his B.S. in biology and physiology from San Francisco State University. He also did postgraduate work in organic chemistry at San Francisco State University. He has taught for 16 years, 11 of those at West Valley High School. He is the school's Science Department Chair and the head Junior Varsity Baseball coach. He thinks that the three most important scientific discoveries are: the helical nature of DNA, redshifts of galaxies, and Mendelian genetics. Coach Button's hobbies include sailing, baseball, and spending time with his family, Jamie, Roy, and Olivia.

Team Members: Eric Andres is a senior. Kevin Burk is a senior. Nicolas Farrell, a senior, was born and lived in the San Francisco Bay Area until the age of 12. He currently lives in Anderson, CA. His favorite subjects include mathematics and the sciences. During high school, he has participated in the Varsity swim team for four years, which won the league title four years in a row. After high school he plans to attend Cal Poly, where he was recently accepted. His hobbies include computer gaming, skateboarding, long walks on the beach, and sword fighting. Senior Mark Mintline's favorite subjects include AP Calculus and AP Biology. He is the No. 1 singles player on the tennis team and plays on the No. 1 doubles team. On the weekends, he volunteers at Mercy Medical Center, a local hospital, where he has volunteered for over 150 hours. Mark also founded HOFBRINCL (named after the diatomic gases), an after school tutoring program at a local elementary school, East Cottonwood. After high school, Mark plans to go to college and become an orthodontist. Zachary Moen, a senior, was born in 1987 to Corina and Michael Moen. Throughout his entire life he has lived in Cottonwood, CA. Ever since grade school, he has had a thirst for knowledge of the occult; this has often caused him to seek out rare books and learn new written languages. His current fascination is learning an old Arabic dialect in order to translate the original Necronomicon. He enjoys long walks on the beach and sword fighting.

#### Woodrow Wilson High School – Portland, Oregon Bonneville Power Administration



Left to right: Ari Allen-Feuer, Carlin Kersch, Elliot Firestone, Deb Wasserman (Volunteer Coach), Erik Werstler, Marc Wasserman; Not pictured: Bill Wilson (Coach)

*Team Coach:* **Bill Wilson** is in his 6th year of teaching. He majored in chemistry at the University of Wisconsin-Madison. He has worked as an analytical chemist with the healthcare and asphalt industries before starting a second career as a teacher. Present interests include developing a technology-rich, student-centered learning experience for first year chemistry students at the high school level. Personal interests include exploring the Pacific Northwest in his 1987 VW Westfalia and awaiting the arrival of his first child in August.

Team Members: Ari Allen-Feuer, the captain of the BPA Regional Team, is a sophomore with one brother. Having attended alternative schools prior to high school, he placed well in the Johns Hopkins talent search for four years running, and in 7th grade placed highest in the state among talent search participants in combined SAT score. Possessing strong interests in math and the physical and chemical sciences, he is currently enrolled in calculus, physics, and systems modeling classes. He is known within his school as one of the consistent top scorers on the AMC and AIME examinations, and is pursuing a high school schedule that will grant him nine science credits and six math credits, including Multivariable Calculus. When not studying for the constant flow of examinations that come with an advanced schedule, Ari enjoys reading, music, cooking, croquet, camping, and the construction of elaborate bonfires. Elliot Firestone is a freshman who is interested in many areas of science, particularly biology. He also plays electric bass, as well as competes on the school cross country, swim, and track teams. In his spare time, Elliot enjoys listening to music. Carlin Kersch is a sophomore. His favorite sciences are physics and chemistry. This is his fourth year in the Science Bowl, having played for the Robert Gray Middle School Science Bowl Team for three years. He has done fairly well on the AMC 10 for two years and next year hopes to make it to the AIME from the AMC 12. He also enjoys a CAD-based technical drafting class and hopes to eventually become an aerospace engineer. He has also been a part of the Wilson cross country team and the Wilson distance team. He also enjoys designing various machines that he thinks would make things easier or better. So far, none have reached any further than the design phase. Marc Wasserman is a freshman. Among his many interests are mathematics, chemistry, and physics. In the 7th grade, Marc placed high in the Johns Hopkins Talent Search SAT, and in 8th grade he was part of Robert Gray Middle School Science Bowl Team that scored second place in the BPA Regional Science Bowl. Since he was young, Marc has been fascinated by flying machines of all sorts. Today, he both builds and flies model aircraft and rockets. In addition to these hobbies, Marc ran with the Wilson cross country team and he is currently playing baseball. On weekends, Marc volunteers in the Oregon Museum of Science and Industry Chemistry Lab. Freshman Erik Werstler is a small person with a big personality. He has one brother, who is 10. This is his first time competing in Science Bowl. Erik's favorite class is chemistry. He is anxiously awaiting a response regarding engineering internship opportunities for summer 2005. He is a member of the Wilson JV Lacrosse team. In his spare time (there is not much), Erik enjoys playing Xbox.













an SI profix meaning 10%. Wilitary Science: Z. refers to the zero-meridian time known as "zulu time." Physics: Z is the symbol for the Z boson. Electrical Engineering: Z is the variable for impedance. Algebra: Z represents the third unknown quantity or a complex variable. Chemistry: Z is the symbol for atomic number. Computer Science: Z is the name of a formal specification language used for computing systems. Mathematics: Z represents the set of integers. Metric System: Z represents an SI profix meaning 1031. Military Science: Z refers to the zero-meridian time known as "zulu time." Physics: Z is the symbol for the Z boson. Algebra: Z represents the third unknown quantity or a complex variable. Chemistry: Z is the symbol for atomic number. Computer Science: Z is the name of a formal specification language used for computing systems. Mathematics: Z represents the set of integers.